

AN INDEX OF MEDICARE PREVAILING CHARGES

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Submitted by:

Gregory C. Pope, M.S.  
Sylvia Hurdle, M.A.  
Jennifer G. Posner, B.A.

The Center for Health Economics Research  
75 Second Avenue  
Suite 100  
Needham, Massachusetts 02194

Mary Henderson, Ph.D.  
Brandeis University  
Waltham, Massachusetts

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## 1.0 INTRODUCTION AND OVERVIEW

In Medicare's "customary, prevailing, and reasonable" method of reimbursing physicians, payment may not exceed the prevailing charge for a procedure. Prevailing charges (often calculated by specialty) are determined separately in each of approximately 240 charge localities as the 75th percentile of charges in that area, with the rate of growth since 1973 limited to the increase in the Medicare Economic Index. Previous studies have found substantial variation in prevailing charges across localities, with three- and four-fold differences in charges for particular procedures common (OTA, 1986; Burney, *et al.*, 1978). Comparison with proxies for practice costs indicates that not all of the variation can be explained by cost differences (Burney *et al.*, 1978).

Extensive geographic variation in prevailing charges not related to practice cost differences raises important concerns. In low charge areas, beneficiary access to care may be comprised or their financial burden excessive. The current pattern of geographic variation may be inequitable to physicians and result in their oversupply in high charge areas and undersupply in low charge areas.

Prevailing charge variation could be studied procedure by procedure. However, it is useful to have a summary measure of the average level of prevailing charges in a locality relative to other localities or to the national average. This report describes the development of such a summary measure, an index of prevailing charges. Comparison with a practice cost index will indicate how much of the variation in prevailings is explained by cost differences and which localities have prevailings which, on average, are high or low compared to costs. The index can also be used for simulating the impact of the application of a practice cost index to payments.

The report is organized as follows. Section 2 briefly discusses data requirements for a Laspeyres price index, and some issues in the selection of a "market basket" of procedures. Section 3 reviews the strengths and weaknesses of potential data sources for construction of the index. Section 4 analyzes the relationship among geographic variation in prevailings of different procedures and draws the implications for index construction. Section 5 describes the construction of a prevailing index from the 1987 BERC survey of prevailing charges. Alternative sets of expenditure proportions to weight the prevailings are developed and explained. Section 6 discusses the

prevailing index values. The effects of alternative weights on the values, and the correlation of medical, surgical, radiology, and consultation subindices with each other and the overall index are described. Appendix tables list the index values by locality.

## 2.0 THE LASPEYRES PRICE INDEX

Three data elements are needed to construct a Laspeyres index of prevailings with the national average as the base "area" of comparison:

- National expenditure shares by procedure;
- National average prevailings;
- Prevailings for particular localities.

The ratio of the latter two elements, locality prevailings divided by the national averages, defines locality prices relative to the national average by procedure. Each locality's price relatives are then weighted by the expenditure shares and summed to determine how "high-priced" a locality is, on average, relative to the national average. Procedures which account for a larger share of national Medicare expenditures are weighted more heavily in determining the index. Mathematically,

$$\sqrt{\sum_i (ES_i) * (P_{ij}/P_i)} \quad (1)$$

where

$I_j$  is the prevailing index for the  $j^{\text{th}}$  locality;

$ES_i$  is the national expenditure share for the  $i^{\text{th}}$  procedure;

$P_{ij}$  is the prevailing for the  $i^{\text{th}}$  procedure in the  $j^{\text{th}}$  locality; and

$P_i$  is the national average prevailing for the  $i^{\text{th}}$  procedure.

Ideally, the prevailing index would be calculated with data for all Medicare procedures. However, an exhaustive index may be precluded by data limitations or may be unmanageable since there are thousands of different procedure codes. An alternative is to calculate an index for a much smaller "market basket" of procedures. The smaller group of procedures should be representative of different types of procedures, performed by different specialties. Moreover, they should be widely-performed so that they are priced in many localities.

If geographic variation in prevailings is highly correlated among certain groups of procedures, one procedure from the group can be used to proxy for the geographic variation of the entire group. In this case, the included procedure should be weighted by the expenditure share for the entire group. Conversely, if geographic variation in prevailings is not highly

correlated, grouping is less important and any reasonably large sample of procedures will tend to yield a similar index. To the extent variation in prevailings is not highly correlated, an aggregate index will be an imperfect indicator of variation in the prevailings of individual procedures.

### 3.0 DATA

Three data bases from 3 different years are available to create the prevailing charge index described above. Each of the three potential data bases has advantages and disadvantages. The ideal data base would provide accurate prevailing and frequency data at the locality level for a group (or market basket) of well-defined procedures that would be representative of the universe of Medicare procedures. Ideally, expenditure shares would be available for all market basket procedures so that they could be weighted in terms of their relative importance to all Medicare Part B expenditures.

Unfortunately, existing data bases do not meet all of the criteria for an ideal data base. Prevailing and frequency data are often missing or inaccurate for many localities. Procedures may not be standardized across localities. Because carriers use different procedure codes and bundle services differently for payment purposes, prevailing and frequency data provided for a procedure may not be describing the same product across localities. Consequently, variation in prevailings across localities may stem from definitional rather than geographic variation. Finally, the number and type of procedures for which prevailing and frequency data are available is not always large or varied enough to develop a market basket that is representative of the universe of Med. care covered procedures.

In this chapter, we first describe each of the three potential data bases and review their relative strengths and weaknesses. Then, based on these comparative strengths and weaknesses, our choice of a data base for a prevailing index is described .

#### 3.1 The 1984 Prevailing Charge Directory

Between 1975 and 1984 HCFA published data from each Part B carrier on the prevailing charge and service volume for each of approximately 100 physician services. The most recent 1984 data were actually submitted by the carriers in 1982. The data were obtained for each procedure at the locality level for the specialty that performed the service most often.

Of the 100 services, 25 were performed most frequently by general practitioners. For these procedures, data were also collected for the specialist that provided the service most often (usually internists, but

sometimes family practitioners or radiologists). Thus, reported prevailings refer to different specialties, depending on the procedure. Furthermore, prevailings for a single procedure can pertain to different specialties if different specialties perform the service more often in different localities.

The advantages of this data base are two-fold. First, the data are fairly well-documented and relatively manageable because of the file's small size. Second, data for a fairly wide range of services are provided, enhancing the representativeness of the market basket.

The disadvantages are numerous however. Foremost among them is a high degree of missing data, resulting from the age of the data. Although published in 1984, the data refers to fee screen year 1982. Not only is this less recent, it predates widespread use of HCPC procedure codes by carriers. In order to obtain prevailings from all localities for a given procedure, crosswalks from carrier-specific codes to HCPC codes had to be developed. Sometimes codes could not be matched and consequently there are missing data for both prevailing charges and frequencies. In addition, carriers did not always maintain information on the number of services provided by a particular specialty at the locality level, making information on service volume especially unreliable. Without frequency data for many procedures, calculating weighted national prevailings essential for computing an index is difficult. Another drawback is the lack of detail at the specialty level. To the extent that carriers calculate specialty specific prevailings for certain market basket procedures, a prevailing index based on these data may reflect variation among specialties rather than geographic variation.

### 3.2 1985 BMAD Data

Since 1983, HCFA has been collecting detailed Part B Medicare data files (BMAD) from all of its carriers on an annual basis. These data include information on all procedures billed by physicians and reimbursed by Medicare. Of particular interest to this study are data on prevailings and frequencies at the locality level for all Medicare procedures. The most recent year for which BMAD data are available is 1985.

While four types of BMAD files are available, all of the data necessary for constructing a geographic prevailing charge index are included on two files: the prevailing and procedure files. Procedure-specific data on prevailings exist only on the prevailing tape and frequencies can be obtained from the procedure file. Both files provide information on locality, specialty, HCPC code modifiers and type of service. The procedure file also includes data on allowed charges that can be used to develop expenditure shares.

Of the three data bases, the BMAD is potentially the best because it provides data on the universe of Medicare prevailings and frequencies. Although such detail at the procedure level is not necessary to create the index (and is in fact undesirable because the resulting file would be too unwieldy), it does greatly facilitate the process of obtaining a representative market basket. Information on expenditure shares can be used to select representative procedures. Furthermore, prevailings for included procedures can be correlated with those of excluded ones to test for representativeness. Another advantage of the 1985 BMAD data is that it can be stratified by specialty, unlike the 1984 Prevailing Charge Directory. Also, it is recent enough that most carriers were able to report the frequency data for HCPC procedure codes instead of carrier-specific codes.

The main drawback of using the 1985 BMAD data is the necessity of merging the prevailing and procedure files in order to have prevailings and frequencies on the same file. Merging the two files results in the loss of all prevailing and frequency data in seven states and missing data on certain procedures in other localities because records cannot be matched. Records fail to match for a number of reasons:

- 1) The carrier calculates prevailing charges for anesthesia services, but not surgical;
- 2) The carrier does not calculate prevailing charges for all specialties or localities;
- 3) The carrier does not calculate prevailing charges for all possible types-of-service; and
- 4) Sufficient documentation for the prevailing files was not provided by all carriers.

Even when records can be matched, there are still data caveats. Several carriers price prevailing charges using more specific categories of specialties or different types-of service methods than HCFA recognizes, but report frequencies for the procedure file based on HCFA specialty and type-of-service codes, so that in merging the data, frequencies for a particular procedure may be matched with the prevailing of a more specific procedure. Finally, sometimes HCPC codes cannot be found on a carrier's prevailing charge file at all, presumably because there was too little activity for a prevailing to be calculated, or the carrier used a fee schedule for the service.

3.3 1987 BERC Data

The Bureau of Eligibility, Reimbursement and Coverage (BERC) obtained information on 1987 prevailing charges and the frequencies used to establish those charges from 53 carriers serving all fifty states and Washington, DC. Data were obtained for 10 types of procedures shown to be among the most costly in terms of total Medicare reimbursements. The procedure types chosen were as follows: initial consultations; EKGs; chest x-rays; coronary artery bypass grafts (CABG); transurethral resection of prostate (TURP); femur fracture surgery; colonoscopies; upper GI endoscopies; hip replacements; and pacemaker implants. In addition, information on other visit and certain other surgical procedures was requested for comparison purposes. In total, data were requested for 67 CPT codes.

The BERC survey obtained charge and frequency data at the locality level. Within locality, data were provided for each specialty (or group of specialties) for which the carrier established a separate prevailing charge screen on the basis of actual charge data for that specialty or specialty group. Carriers indicated if no locality distinctions or if no specialty distinctions were made for payment purposes.

The 1987 BERC data are both the most recent of the three potential data sets and probably the most accurate. By surveying the carriers for prevailing and frequency data simultaneously, BERC managed to avoid many of the problems relating to the use of carrier-specific rather than HCPC codes and linking prevailing and procedure files. Consequently, data exist for many procedures in all localities, unlike in the two other data bases where the data in certain localities may be missing altogether. In addition, like the 1985 BMAD data, these data can be stratified by specialty.

The major limitation of the BERC data is the number and type of procedures for which data were collected. Prevailing charge and frequency data were collected for only 66 procedures compared to 100 procedures for the 1984 directory data and the universe of Medicare procedures on the BMAD files. More importantly, the types of procedures included do not represent as wide a range of services as those in the 1984 directory data and certainly are not as comprehensive as the BMAD data. For example, of the 66 procedures, nine were various types of coronary artery bypass grafts, 12 were different types of colonoscopies, 7 were various pacemaker implant procedures, and 6 were very similar sigmoidoscopies. While certain types of CABGs are performed relatively frequently and account for a high share of expenditures, others are quite obscure and comprise very little of total Medicare expenditures. Of the 66 procedures, only 10 truly different types of services are represented. This drawback could compromise the representativeness of the market basket, resulting in an index that describes variation in a select few services rather than a representative sample.

### 3.4 Conclusion

The 1987 BERC data is the best of the three data bases discussed above, for our purposes. It is the most recent, the most accurate, and the most geographically comprehensive. The unrepresentativeness of the data set can be addressed by weighting the BERC procedures by expenditure shares based on allowed charges from the BMAD procedure file. Since the creation of expenditure shares do not necessitate the use of any data on the prevailing file, the problems associated with merging to the files do not exist. Using BMAD allowed charges to generate expenditure shares is appropriate because they reflect exactly how much Medicare spent on each covered service.

BMAD data from the procedure file can also be used to show how correlated allowed charges are across procedures without encountering problems involved in linking the two files. Although using BMAD data for this purpose allows analysis of intercorrelation in both narrow and broad procedure groups it has a potentially serious drawback, namely that using allowed charges may not be equivalent to using prevailings. Consequently, we use the 1984 Directory data to analyze the relationship across procedures in geographic charges in this report. A later report will use allowed charges from the 1985 BMAD data for comparison.

## 4.0 THE RELATIONSHIP AMONG GEOGRAPHIC VARIATION IN PREVAILING CHARGES

Appropriate weighting of the limited, nonrandom sample of procedures in the 1987 BERC survey should result in a more representative index of prevailing charges. If geographic variation in the prevailings of procedures included in the BERC survey is highly correlated with variation in the prevailings of non-included procedures, the BERC procedures can be weighted to proxy for the variation in larger groups of procedures, overcoming the limitations of the BERC sample. The degree of correlation among the prevailing charges of different procedures will determine appropriate weights. The extent of correlation is of additional interest because it indicates how accurately an index proxies for variation in the prevailings of individual procedures, and ultimately has implications for how much of variation in prevailings may be explained by a cost index. This section studies the degree of correlation of geographic variation in prevailings of different procedures.

Two data sources are used to analyze correlations. The 1984 Medicare Directory of Prevailing Charges assembles prevailing charge information for a representative selection of procedures for a large number of localities.

However, because the Directory procedures were selected to represent a wide range of procedures, they are not useful to analyze correlations among the prevailings of closely-related procedures. For this purpose, we use the 1987 BERC survey. In the future, we plan to replicate and extend the analysis in this section using the 1985 BMAD data, which has advantages over the Directory data as discussed in Section 3. Thus, the analysis and conclusions of this section should be regarded as preliminary.

The 1984 Directory contains information on prevailing charges for 110 different payment codes. Elimination of laboratory and durable medical equipment codes reduces this number to 78. A list of these 78 procedures is given in Appendix Table A-2. For general practitioners, prevailings were collected for only about 30 of these codes; consequently, we limited the analysis to "specialist" prevailings. The specialist for which a prevailing was collected varies by procedure, ranging from internist for many of the visit codes, to psychiatrist for psychotherapy, surgeons for the surgery codes, and radiologists for the radiology codes. For most of the 78 medical/surgical codes, specialist prevailings were collected for 150 or more localities.

Bivariate correlations cannot be used to analyze the relationship among the prevailings of large numbers of procedures because the number of correlations which must be examined is unmanageably large. Instead, the statistical procedure known as "factor analysis" is used. Factor analysis attempts to explain the intercorrelations among a set of variables by a small number of unobserved underlying "factors". If the prevailing charges of all procedures were perfectly correlated, then one underlying factor would explain all the variance in the set of prevailing charges. In this case, there is only one "dimension" to geographic variation in prevailings, which is captured by the single factor. If there were two groups of procedures whose prevailings were perfectly correlated within group, but uncorrelated between groups, then there would be two underlying factors, one for each group. In actual data sets, usually a number of factors similar or equal to the number of variables is necessary to account for all the variance of the data. However, the proportion of the variance accounted for by the first factor, or first few factors, indicates how highly intercorrelated the set of variables is. Moreover, factor analysis determines the degree of correlation of each variable (in this case, procedure) with each factor, so the factors can be interpreted by the procedures with which they are highly correlated.

We performed an unweighted principal components factor analysis on prevailings of the 78 procedures from the 1984 Directory. The results are summarized in Table 1. The interpretations of the factors are based on the correlations (factor loadings) of the procedures with the factors. The factor loadings for the first 10 factors are lengthy and so are listed in Appendix

TABLE 1

## FACTOR ANALYSIS OF 1984 MEDICARE DIRECTORY SPECIALIST PREVAILING CHARGES

| Factor | Proportion Variance | Cumulative Proportion | Interpretation*   |
|--------|---------------------|-----------------------|---|
| 1      | 36.4%               | 36.4%                 | General medical/surgical factor                             |
| 2      | 9.7                 | 46.1                  | Emergency room visits/radiation therapy                     |
| 3      | 5.7                 | 51.8                  | X-rays  |
| 4      | 5.1                 | 56.9                  | Consultations   |
| 5      | 4.3                 | 61.2                  | Certain diagnostic tests**                                  |
| 6      | 3.4                 | 64.5                  | Follow-up hospital visits                                   |
| 7      | 2.7                 | 67.2                  | Psychotherapy   |
| 8      | 2.5                 | 69.7                  | CABG/Insertion of pacemaker/<br>Prostatectomy -- suprapubic |
| 9      | 2.3                 | 72.0                  | Chemotherapy  |
| 10     | 2.1                 | 74.1                  | CAT-scans   |

\*Interpretations are based on a varimax rotation. Procedure correlations with the 10 rotated factors are given in Appendix Table A-L.

\*\*Arthocentesis - major joint/needle puncture of bursa/thoracentesis/  
diagnostic cystourethroscopy.

Source: Medicare Directory of Prevailing Charges, 1984.

Table A-1. The first factor accounts for 36 percent of the variance in the prevailing charges, indicating only a moderate degree of intercorrelation. The majority of visits and procedures are moderately or highly correlated with the first factor (45 of the 78 procedures have loadings of .4 or higher--see Table A-1), so the first factor may be interpreted as a general medical/surgical factor. The second factor accounts for only 10 percent more of the variance; it is clearly interpretable as an emergency room visit/radiation therapy factor by the much higher loadings of these procedures than any others on this factor. After the second factor, the incremental variance accounted for by successive factors falls to 6 percent or less. As a group, the first ten factors account for about three-quarters of the variance in the prevailings. Most of the factors are easily interpretable in terms of a small group of procedures (which are often not highly correlated with the general factor), as shown in Table 1.

The major conclusions from the factor analysis of the Directory procedures are that:

- As a whole, the Directory prevailings are only moderately intercorrelated.
- For the most part, the Directory prevailings do not separate into well-defined, highly-correlated groups. Instead, most medical/surgical prevailings are moderately intercorrelated with each other, while some other, smaller groups of prevailings are more highly intercorrelated, but less correlated with the larger group.

These two findings have the following implications. First, an index of prevailings will be only an approximate indicator of the geographic variation in most individual procedures' prevailings, and will be misleading for some procedures. Second, any single index of practice costs will at most explain a moderate amount of the variance in the prevailings of individual procedures as a group since their variation is only moderately correlated (although a practice cost index might explain most of the variance in an index of prevailing charges). Third, weighting the sample of BERC procedures by the allowed charges for broad groups will not improve the index significantly since procedures do not separate into highly intercorrelated large groups. Indeed, the particular weighting scheme chosen for the BERC procedures probably will not have a substantial influence on the index values. Any reasonably large and representative group of procedures should yield a similar prevailing index. The uncorrelated components of the prevailings will tend to cancel out when an average (i.e., an index value) is calculated for any locality, so the index will converge to the correlated component of the prevailings.

The Directory prevailings allow analysis of correlations among a broadly representative sample of procedures. However, because of the broad coverage, correlations among the prevailings of more closely related, narrower groups of procedures cannot be analyzed. For this purpose, we used the 1987 BERC Survey data.

Table 2 presents correlation coefficients among the prevailings of six of the CABG codes sampled in the BERC survey (three CABG codes were excluded because prevailings were available for very few localities). Geographic variation in CABG prevailings is highly correlated--all of the pairwise correlations exceed .7 and most are above .8. Conversely, the intra-group correlations of certain other categories--the pacemaker implant codes, the sigmoidoscopy and colonoscopy codes--are not higher or only slightly higher, than extra-group correlations. Hence, the findings of this preliminary analysis are inconclusive. The prevailings of some closely-related groups of procedures are high, but this is not true for all groups of procedures.

Considering the analysis of both the Directory and the BERC survey data, the following implications for the construction of an index from the BERC data emerge. Using the prevailings of BERC procedures to proxy for the prevailings of clinically-related, narrowly-defined groups of procedures may improve the accuracy of the index somewhat. There will not be much gain in accuracy from using the BERC prevailings to proxy for less-closely-related, larger groups of procedures. Any reasonable weighting scheme should result in a similar index. Moreover, the limited and nonrandom sample of procedures in the BERC survey probably will not bias a prevailing index created from it to any appreciable extent.

## 5.0 CONSTRUCTION OF A PREVAILING CHARGE INDEX FROM THE 1987 BERC SURVEY DATA

This section describes the construction of a prevailing charges index from the 1987 BERC Survey data. The discussion in Section 2 indicated that three data elements are necessary to construct a Laspeyres index:

- (1) National expenditure shares by procedure;
- (2) National average prevailing charges by procedure; and
- (3) Prevailing charges by procedure for particular localities.

Section 5.1 describes the national expenditure weights used to aggregate the ratio of locality prevailing charges to the national average. Three different sets of weights were developed. They vary depending on how the limited set of BERC procedures are used to proxy for non-included procedures.

TABLE 2

## GEOGRAPHIC CORRELATIONS AMONG CABG PREVAILING CHARGES

| <u>HCPC Code</u> | <u>HCPC CODE</u> |              |              |              |              |
|------------------|------------------|--------------|--------------|--------------|--------------|
|                  | <u>33511</u>     | <u>33512</u> | <u>33513</u> | <u>33514</u> | <u>33516</u> |
| 33510            | .86              | .83          | .82          | .71          | .77          |
| 33511            |                  | .82          | .85          | .77          | .79          |
| 33512            |                  |              | .92          | .84          | .84          |
| 33513            |                  |              |              | .91          | .85          |
| 33514            |                  |              |              |              | .86          |

Source: 1987 BERC Survey of Prevailing Charges.

Section 5.2 describes the calculation of national average and locality prevailing charges. In addition, the editing of the localities reported by the carriers, some of which are not geographically based, and the development of a final locality list for which the index was computed, are discussed.

Section 5.3 details how the expenditure weights and price relatives described in Sections 5.1 and 5.2, respectively, are combined to yield the actual index values.

### 5.1 Developing National Expenditure Shares

The procedures BERC sampled in its 1987 survey are not a representative cross-section of all procedures. The survey included only 66 procedures accounting for 27.6% of total allowed charges. Appropriately weighting the BERC prevailings should improve the representativeness of the prevailing charge index.

The premise we used in weighting the BERC prevailings was that the prevailings of clinically-related procedures are more highly correlated than the prevailings of randomly-selected procedures. As was shown in Section 4, this is true only to a limited extent. Nevertheless, to the extent it is true, and the correlations among prevailings do seem to be higher as the procedures are more similar, weighting the BERC prevailings by the expenditure share of a related group of procedures should increase the accuracy of the prevailing index.

Three sets of expenditure weights were developed. In each alternative, BERC procedures were assigned to one of four major groups: surgical, medical, radiology, and consultations. Subindices were constructed for each of the four types of service which were then combined into the overall index using aggregate expenditure weights for each type of service. Four of eight major types of service are represented in the BERC data. It does not include any procedures in the other groups: pathology, anesthesiology, other, or unknown. Therefore, our index includes the four types of service only, which account for 70.6 percent of total allowed charges. Total allowed charge weights for each group have been calculated by Terrence Kay of HCFA-ORD from 1985 BMAD data using carrier-reported type of service.\* The share of allowed charges for each type of service as a proportion of the four-group total are: surgical 40.66%, medical 41.13%, radiology 12.57%, and consultations 5.64%.

We developed three methods of weighting procedures within the four type of service groups. Each uses individual procedure expenditure shares which

\*We adjusted the shares of allowed charges received from Terrance Kay of HCFA-ORD to equal shares of allowed charges for medical, surgical, consultations, and radiology procedures only.

were computed as the procedure's share of 1985 total allowed charges. They differ in how the BERC survey prevailings are weighted to represent the prevailings of unsurveyed procedures.

Method 1 is the simplest. Within each group, the BERC procedures' individual expenditure shares were proportionally inflated so that the sum equalled the aggregate expenditure share of that type of service (e.g., 40.7 percent for the surgical group). Method 1 assumes that prevailings of procedures excluded from the BERC data are more highly correlated with BERC procedures' prevailings in the same types of service than with other types of service. However, no grouping within the four aggregate types of service is used.

Method 2 uses subgroups of procedures within the aggregate type of service classifications. Nonsurveyed procedures were grouped with clinically related BERC procedures within the four type of service groups to form sub-groups and the BERC procedures in each sub-group were weighted to represent the entire sub-group's expenditure share. The sub-groups are:

Surgical  
orthopedic surgery  
endoscopies  
CABGS  
pacemakers  
procedures performed by general surgeons  
procedures performed by urologists  
Medical  
office visits  
hospital visits  
electrocardiography

For example, the variation in all office visit prevailings is represented by the 7 BERC office visits. For the radiology and consultation groups, no sub-groups were used; the two chest x-rays were used to represent all radiology and the five consultations were used to represent all consultations (as in Method 1). Appendix A, Table 3 lists the procedures in each sub-group. The BERC procedures in each sub-group were proportionally weighted based on individual procedure expenditure shares to represent the expenditure share of the entire sub-group, then the weights were proportionally inflated to the type of service's aggregate expenditure share (as in Method 1).

Method 3 uses the same sub-groups used in Method 2. However, unlike Method 1 or Method 2, the expenditures shares of unsurveyed procedures are allocated equally to the BERC procedures within each of the subgroups and aggregate type of service groups. This method results in more equal weights for the BERC procedures than in the first two methods. The rationale for more equal weighting is that when proportional weighting is used, as in Methods 1

and 2, BERC procedures with large individual expenditure shares receive proportionally large weights. However, within a clinical grouping, the prevailings of unsurveyed procedures are equally likely to be correlated with the prevailings of any of the BERC procedures in that group. Thus, allocating the expenditure shares of unsurveyed procedures equally, rather than in proportion to the BERC procedures' individual expenditure shares, may make more sense.

Table 3 shows the overall index weights for each of the BERC procedures derived from the 3 methods. There is not much difference between the weights using Methods 1 and 2. The differences are due to the within type of service sub-groups. In Method 3 procedures are weighted more evenly than in Method 2. The procedures in the General Surgeon Procedures sub-group illustrate the difference between Methods 2 and 3. In Method 2, the first gallbladder surgery is weighted much more heavily than the other 2 because its individual expenditure share is much higher. In Method 3, the first gallbladder surgery is weighted only slightly more heavily than the other two procedures because the expenditure shares of unsurveyed procedures are divided equally among the procedures. The weights for the limited office visit code illustrate the differences between the three methods. The weight for this procedure using Method 1 is 13.6, which is the procedure's actual expenditure share, inflated to its proportion of the medical type of service weight (41.1%). The weight for the limited office visit using Method 2 is 10.4 because a smaller expenditure share is allocated to office visits as a group in Method 2 than in Method 1. The weight for this procedure is only 5.6 using Method 3 because the expenditure share of unsurveyed office visits is distributed among the seven BERC office visits equally instead of being allocated mostly to the procedures with the largest expenditure shares, as is done in Method 2.

## 5.2 Calculation of Price Relatives

Prevailing charges should be reported in a large number of localities for the procedures used to create an index of prevailings. Column 1 of Table 4 shows that for 13 of the 66 BERC procedures, fewer than 100 localities report prevailings. These procedures tend to be the more rarely performed, highly complex procedures (e.g., CABGs with 6 or more autogenous grafts or two or more nonautogenous grafts). Because these procedures were performed so infrequently, we did not include these 13 procedures in creating the index.

For each included procedure, the locality prevailing was calculated as a weighted average of specialty prevailings within locality. Consequently, prevailings are sensitive to locality specialty mix. Future work will explore the effects of specialty mix on variations in prevailing charges.

TABLE 3

## EXPENDITURE WEIGHTS FOR 1987 BERC SURVEY PREVAILING CHARGES, BY PROCEDURE

|                                   | HIPCS<br>Code | Weights<br>Method_1 | Weights<br>Method_2 | Weights<br>Method_3 |
|-----------------------------------|---------------|---------------------|---------------------|---------------------|
| <b>SURGERY, Total</b>             |               | 40.66%              | 40.66%              | 40.66%              |
| <b>Orthopedic_Surgery</b>         |               |                     |                     |                     |
| Carpal Tunnel                     | 64721         | .49                 | .58                 | 1.46                |
| Hip Replacements                  | 27130         | 3.41                | 4.01                | 2.11                |
|                                   | 27131         | .70                 | .82                 | 1.50                |
| Femur Fractures                   | 27236         | 2.08                | 2.45                | 1.81                |
|                                   | 27244         | 2.64                | 3.11                | 1.94                |
| <b>Subtotal</b>                   |               | 9.32                | 10.96               | 8.82                |
| <b>Endoscopies</b>                |               |                     |                     |                     |
| Sigmoidoscopies                   | 45330         | .80                 | .61                 | .65                 |
|                                   | 45331         | .13                 | .10                 | .50                 |
|                                   | 45333         | .13                 | .10                 | .50                 |
| Colonoscopies                     | 45360         | 1.07                | .82                 | .71                 |
|                                   | 45365         | .24                 | .18                 | .53                 |
|                                   | 45370         | .28                 | .21                 | .54                 |
|                                   | 45378         | 2.07                | 1.58                | .94                 |
|                                   | 45380         | .92                 | .70                 | .68                 |
|                                   | 45385         | 1.73                | 1.32                | .86                 |
| Upper GI Endoscopies              | 43235         | 2.62                | 2.00                | 1.06                |
|                                   | 43239         | 1.78                | 1.36                | .87                 |
| <b>Subtotal</b>                   |               | 11.77               | 8.98                | 7.85                |
| <b>CABGs</b>                      |               |                     |                     |                     |
| CABGS                             | 33510         | .42                 | .33                 | 1.05                |
|                                   | 33511         | 1.30                | 1.03                | 1.25                |
|                                   | 33512         | 2.87                | 2.26                | 1.60                |
|                                   | 33513         | 2.50                | 1.97                | 1.52                |
|                                   | 33514         | 1.07                | .84                 | 1.20                |
| <b>Subtotal</b>                   |               | 8.17                | 6.43                | 6.61                |
| <b>Facemakers</b>                 |               |                     |                     |                     |
| Facemakers                        | 33200         | .13                 | .22                 | .83                 |
|                                   | 33206         | .59                 | .99                 | .93                 |
|                                   | 33207         | .84                 | 1.41                | .99                 |
|                                   | 33208         | .43                 | .72                 | .90                 |
|                                   | 33212         | .17                 | .29                 | .84                 |
|                                   | 33216         | .08                 | .13                 | .82                 |
| <b>Subtotal</b>                   |               | 2.24                | 3.77                | 5.31                |
| <b>General_Surgery_Procedures</b> |               |                     |                     |                     |
| Gallbladder Surgeries             | 47600         | 1.05                | 3.03                | 2.40                |
|                                   | 47610         | .75                 | 2.17                | 2.33                |
| Hysterectomy                      | 58150         | .75                 | 2.17                | 2.33                |
| <b>Subtotal</b>                   |               | 2.55                | 7.37                | 7.07                |
| <b>Urologist_Procedures</b>       |               |                     |                     |                     |
| TURPs                             | 52601         | 6.22                | 2.97                | 2.57                |
| Suprapubic Prostated              | 55821         | .25                 | .12                 | 1.24                |
| Petropubic Prostated              | 55831         | .13                 | .06                 | 1.21                |
| <b>Subtotal</b>                   |               | 6.61                | 3.16                | 5.01                |
| <b>MEDICAL, Total</b>             |               | 41.13               | 41.13               | 41.13               |
| <b>Office Visits</b>              |               |                     |                     |                     |
| New, brief                        | 90000         | .29                 | .22                 | 1.46                |
| New, limited                      | 90010         | .84                 | .64                 | 1.63                |
| New, intermediate                 | 90015         | 1.27                | .97                 | 1.77                |
| New, extended                     | 90017         | .39                 | .30                 | 1.49                |
| New, comprehensive                | 90020         | 2.45                | 1.87                | 2.14                |
| Brief                             | 90040         | 4.67                | 3.56                | 2.83                |
| Limited                           | 90050         | 13.64               | 10.38               | 5.64                |
| <b>Total</b>                      |               | 23.56               | 17.93               | 16.96               |
| <b>Hospital Visits</b>            |               |                     |                     |                     |
| New, brief                        | 92200         | .72                 | 1.32                | 4.90                |
| New, intermediate                 | 92215         | 2.12                | 3.90                | 5.33                |
| New, comprehensive                | 92220         | 6.97                | 12.85               | 6.85                |
| <b>Subtotal</b>                   |               | 9.80                | 18.07               | 17.07               |
| <b>EKGs</b>                       |               |                     |                     |                     |
| Complete EKG                      | 93000         | 5.04                | 3.33                | 3.13                |
| EKG Tracing                       | 93005         | .17                 | .11                 | 1.61                |
| EKG Report                        | 93010         | 2.57                | 1.69                | 2.36                |
| <b>Subtotal</b>                   |               | 7.77                | 5.13                | 7.10                |
| <b>RADIOLOGY, Total</b>           |               | 12.57               | 12.57               | 12.57               |
| Chest x-ray, one view             | 71010         | 4.26                | 4.26                | 5.93                |
| Chest x-ray, two views            | 71020         | 8.31                | 8.31                | 6.64                |
| <b>CONSULTATIONS, Total</b>       |               | 5.64                | 5.64                | 5.64                |
| Limited                           | 90600         | .42                 | .42                 | 0.70                |
| Intermediate                      | 90605         | .56                 | .26                 | 0.67                |
| Extended                          | 90610         | .68                 | .68                 | 0.86                |
| Comprehensive                     | 90620         | 3.22                | 3.22                | 2.38                |
| Complex                           | 90630         | .97                 | .97                 | 1.03                |

Source: 1985 BMAD allowed charges

Table 4  
Descriptive data on 1987 BERC survey prevailing charges, by procedure

|           |     | 1987 Prevailing Charge |                     |         |         |         |         |
|-----------|-----|------------------------|---------------------|---------|---------|---------|---------|
|           |     | Number of Localities   | Frequency of Procs. | Mean    | Median  | Minimum | Maximum |
| Type      |     |                        |                     |         |         |         |         |
| Cabg      |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 33510     | 101 | 3088                   | 3606.05             | 3358.00 | 1465.00 | 7500.00 |         |
| 33511     | 124 | 10957                  | 4110.28             | 3880.50 | 420.00  | 8300.00 |         |
| 33512     | 126 | 24056                  | 4501.67             | 4400.00 | 650.00  | 7500.00 |         |
| 33513     | 120 | 20708                  | 4776.87             | 4632.70 | 2276.20 | 8500.00 |         |
| 33514     | 107 | 7317                   | 4734.36             | 4644.00 | 2579.70 | 7500.00 |         |
| 33516     | 76  | 1836                   | 4988.83             | 4884.80 | 3074.10 | 7500.00 |         |
| 33520     | 1   | 1                      | 2910.20             | 2910.20 | 2910.20 | 2910.20 |         |
| 33525     | 1   | 5                      | 2910.20             | 2910.20 | 2910.20 | 2910.20 |         |
| 33528     | 5   | 67                     | 3990.23             | 3600.00 | 3081.75 | 4650.00 |         |
| Cartun    |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 64721     | 202 | 33895                  | 544.69              | 545.90  | 111.76  | 1109.00 |         |
| Colon     |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 45360     | 221 | 193407                 | 295.09              | 300.00  | 62.50   | 578.20  |         |
| 45365     | 199 | 24332                  | 381.52              | 395.65  | 88.00   | 618.80  |         |
| 45367     | 23  | 126                    | 572.04              | 556.70  | 217.40  | 840.00  |         |
| 45368     | 53  | 532                    | 468.54              | 483.80  | 240.70  | 1200.00 |         |
| 45369     | 30  | 289                    | 488.27              | 479.05  | 237.30  | 900.00  |         |
| 45370     | 166 | 16057                  | 591.28              | 600.00  | 132.30  | 922.20  |         |
| 45378     | 202 | 219025                 | 463.50              | 475.10  | 238.50  | 700.00  |         |
| 45379     | 32  | 699                    | 634.64              | 650.00  | 216.25  | 1000.00 |         |
| 45380     | 193 | 82908                  | 515.32              | 518.30  | 168.60  | 874.00  |         |
| 45382     | 70  | 1654                   | 559.21              | 557.40  | 126.20  | 930.30  |         |
| 45383     | 57  | 547                    | 607.13              | 600.00  | 215.70  | 850.00  |         |
| 45385     | 186 | 222619                 | 737.82              | 700.00  | 306.40  | 1200.00 |         |
| ERG       |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 93000     | 264 | 8695412                | 38.19               | 35.00   | 8.25    | 75.00   |         |
| 93000P    | 5   | 48390                  | 19.59               | 20.00   | 11.00   | 44.30   |         |
| 93005     | 194 | 166164                 | 29.06               | 25.00   | 9.00    | 75.00   |         |
| 93010     | 240 | 1.1E+07                | 15.10               | 15.00   | 4.10    | 38.80   |         |
| 93010P    | 12  | 702956                 | 18.38               | 15.50   | 10.08   | 33.20   |         |
| Femfr     |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 27236     | 205 | 62880                  | 1288.98             | 1150.00 | 354.80  | 2883.40 |         |
| 27244     | 211 | 72897                  | 1279.43             | 1143.90 | 754.10  | 2883.40 |         |
| Glendo    |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 43235     | 210 | 370699                 | 338.16              | 323.70  | 103.70  | 693.30  |         |
| 43239     | 186 | 186027                 | 385.15              | 375.00  | 173.20  | 685.00  |         |
| Gall      |     |                        |                     |         |         | -       |         |
| Procedure |     |                        |                     |         |         |         |         |
| 47600     | 213 | 30832                  | 924.90              | 886.90  | 450.50  | 1885.30 |         |
| 47610     | 191 | 16246                  | 1111.29             | 1018.10 | 332.60  | 2218.00 |         |
| Hip       |     |                        |                     |         |         |         |         |
| Procedure |     |                        |                     |         |         |         |         |
| 27130     | 197 | 44011                  | 2736.72             | 2661.60 | 255.10  | 4436.00 |         |
| 27131     | 129 | 8807                   | 2776.05             | 2849.35 | 1179.00 | 4800.00 |         |

Table 4 (continued)  
Descriptive data on 1987 BERC survey prevailing charges, by procedure

| 1987 Prevailing Charge |     |                      |                     |         |        |         |
|------------------------|-----|----------------------|---------------------|---------|--------|---------|
|                        |     | Number of Localities | Frequency of Procs. | Mean    | Median | Minimum |
| Hyster                 |     |                      |                     |         |        |         |
| Procedure              |     |                      |                     |         |        |         |
| 58150                  | 196 | 25156                | 1097.27             | 998.10  | 169.60 | 1996.20 |
| Pace                   |     |                      |                     |         |        |         |
| Procedure              |     |                      |                     |         |        |         |
| 33200                  | 107 | 1962                 | 1328.20             | 1261.60 | 350.00 | 2000.00 |
| 33201                  | 31  | 2366                 | 1099.52             | 1082.10 | 700.00 | 1885.30 |
| 33206                  | 176 | 14663                | 1213.63             | 1150.00 | 221.80 | 2370.00 |
| 33207                  | 187 | 26355                | 1216.16             | 1164.50 | 221.80 | 2044.20 |
| 33208                  | 160 | 9894                 | 1576.57             | 1584.00 | 500.00 | 2520.00 |
| 33212                  | 164 | 7716                 | 674.84              | 611.40  | 221.80 | 1500.00 |
| 33216                  | 129 | 2871                 | 607.28              | 590.90  | 277.10 | 1959.50 |
| Sigmod                 |     |                      |                     |         |        |         |
| Procedure              |     |                      |                     |         |        |         |
| 45330                  | 239 | 400983               | 108.45              | 108.70  | 26.00  | 250.00  |
| 45331                  | 198 | 34722                | 149.35              | 140.00  | 51.00  | 279.70  |
| 45332                  | 44  | 2050                 | 155.10              | 147.90  | 68.75  | 447.20  |
| 45333                  | 150 | 5789                 | 198.67              | 189.50  | 88.70  | 510.10  |
| 45334                  | 57  | 379                  | 356.94              | 266.10  | 102.70 | 1341.50 |
| 45336                  | 34  | 351                  | 370.49              | 383.50  | 88.70  | 688.20  |
| Turps                  |     |                      |                     |         |        |         |
| Procedure              |     |                      |                     |         |        |         |
| 52601                  | 191 | 201702               | 1199.47             | 1108.90 | 639.20 | 2059.00 |
| 55821                  | 142 | 4631                 | 1326.71             | 1207.90 | 761.50 | 2300.00 |
| 55831                  | 108 | 2389                 | 1374.02             | 1330.50 | 676.30 | 2268.30 |
| Visits                 |     |                      |                     |         |        |         |
| Procedure              |     |                      |                     |         |        |         |
| 90000                  | 253 | 763399               | 25.60               | 24.40   | 4.50   | 77.60   |
| 90010                  | 262 | 1738968              | 31.25               | 31.10   | 6.00   | 82.00   |
| 90015                  | 264 | 2099475              | 40.22               | 38.00   | 10.60  | 145.00  |
| 90017                  | 219 | 582941               | 47.33               | 45.00   | 13.30  | 150.00  |
| 90020                  | 243 | 2089311              | 69.03               | 66.60   | 10.00  | 175.00  |
| 90040                  | 266 | 1.4E+07              | 18.22               | 17.50   | 4.50   | 135.00  |
| 90050                  | 273 | 4.0E+07              | 21.09               | 21.00   | 6.60   | 86.70   |
| 90200                  | 259 | 640574               | 54.89               | 55.30   | 12.40  | 116.45  |
| 90215                  | 259 | 1924803              | 64.87               | 66.50   | 15.80  | 166.40  |
| 90220                  | 269 | 5043994              | 85.33               | 84.50   | 22.20  | 210.00  |
| 90600                  | 262 | 5950652              | 62.23               | 55.50   | 10.00  | 132.20  |
| 90605                  | 248 | 618088               | 63.80               | 64.30   | 11.10  | 130.00  |
| 90610                  | 254 | 976133               | 78.08               | 77.60   | 22.00  | 157.25  |
| 90620                  | 259 | 3958710              | 103.12              | 101.40  | 25.00  | 221.80  |
| 90630                  | 211 | 837213               | 136.89              | 131.00  | 28.50  | 319.00  |
| X-ray                  |     |                      |                     |         |        |         |
| Procedure              |     |                      |                     |         |        |         |
| 71010                  | 266 | 1770962              | 26.78               | 26.60   | 8.70   | 60.00   |
| 71010P                 | 104 | 5379513              | 13.90               | 13.70   | 2.70   | 25.00   |
| 71010T                 | 13  | 71510                | 29.90               | 22.20   | 14.60  | 80.00   |
| 71020                  | 271 | 4562270              | 38.22               | 39.90   | 9.50   | 71.00   |
| 71020P                 | 103 | 5278811              | 17.19               | 17.00   | 2.30   | 38.60   |
| 71020T                 | 16  | 49012                | 26.86               | 30.00   | 16.70  | 70.00   |

To create a national benchmark, we averaged the non-zero prevailings by procedure in all 319 reported localities, weighting by service volume in each locality. This yielded a national mean prevailing charge for each procedure as shown in Column 3, Table 4. As expected, national mean prevailings are highest for CABGs, followed by hip replacements and other surgeries, then by diagnostic procedures such as endoscopies and finally by visits and tests (e.g., EKGs and x-rays). Price relatives for each procedure in each locality were calculated as the ratio of the locality prevailing to the national average for that procedure.

Apparently, many services were not performed in all localities in 1987, and consequently prevailings in these localities did not contribute to the national average. In fact, Column 1 of Table 4 shows that of the 319 localities reported by the carriers, the largest number of localities reporting prevailings for a single procedure is 273. This is because many carriers also use locality codes to make non-geographical distinctions among prevailings. For example, Aetna carriers reserve locality codes from 50 to 59 to describe the prevailing for the professional component of the service. These prevailings can easily be folded back into codes 01 through 09 which represent actual geographic localities. Other carriers also have more codes than can be justified by the known number of geographic localities in their jurisdiction. Until it can be determined how the prevailings and frequencies in these residual "localities" can be folded into existing localities, we must exclude them from the geographic index. This may bias certain locality prevailings we calculate. Fortunately, exclusion of residual localities affects a small number of procedures and those only marginally (i.e. the frequencies in the residual categories were usually low if not zero).

Excluding non-geographic (or unidentifiable) locality codes and folding in others reduced the number of localities to 236. The final index was created for these 236 localities. However, all 319 localities were used to compute an unbiased national average.

### 5.3 Computation of Index Values

Three variations of an index of Medicare prevailing charges, corresponding to the three sets of weights reported in Table 3, were calculated from the 1987 BERC survey. Each index was computed according to the Laspeyres price index formula, equation (1) of Section 2. Price relatives by procedure for a locality, calculated as described in Section 5.2, were weighted by expenditure shares, described in Section 5.1, then summed. Since most localities were missing a prevailing for one or more procedures, the sum

of weighted price relatives were divided by the sum of the weights of reported prevailings. If this was not done, index values for localities with non-reported prevailings would be too low, and the more prevailings were absent, the more biased downwards the index values would be.

## 6.0 RESULTS

How sensitive is the index of prevailing charges to which of the three sets of expenditure weights reported in Table 3 is used? Given the similarity of the three sets of weights, and the correlational analysis described in Section 4, the index is not expected to be very sensitive to the choice of weights. Indeed, this is the case. The pairwise correlations among the three variations are .98 or higher. The differences among index values for particular localities are also quite small. The largest difference between the "Method 1" - weighted and "Method 2" - weighted indices is only .07 (1.0 is the national mean), and only 4 localities have differences of .05 or more. The largest difference between the "Method 2" - weighted and "Method 3" - weighted index values is .06 and only three localities have values which differ by .05 or more. Between the "Method 1" and "Method 3" indices, the largest difference is .10 and 13 localities have values that differ by .05 or more.

Given the close similarity of the three variations of the prevailing charge index, there is little point in presenting results for all three indices. Thus, we present only the simplest variation of the index, the "Method 1" - weighted index. It may be recalled from Section 5.1 that in this weighting scheme, the BERC procedures were grouped only into the form aggregate type of service categories of medical, surgical, radiology, and consults. Then the grouped individual procedure expenditure shares (of allowed charges) were simply proportionally inflated to sum to the aggregate share of each type of service in total allowed charges for medical, surgical, radiology and consultation services.

Appendix Table A-4 lists overall index and radiology, medical, surgical and consultation subindex values by state, carrier, and locality. In addition, as a measure of the amount of data on which each index value is based, the sum of the expenditure shares of reported prevailing charges for each locality is shown (the maximum is 1.0). Appendix Table A-5 presents the same data sorted by the value of the overall index from highest to lowest locality. Since, in each locality, each procedure's prevailing charge is standardized by the national average prevailing for that procedure, the base of the index, 1.0, is the national average.

The ranking of localities by how expensive their prevailings are (Table A-5) is generally as expected. Manhattan is the most expensive locality, exceeding the national average by 64 percent. It is followed by the eight Los Angeles localities, then several New York City areas and California localities, Alaska and Miami. Many other California localities are among the highest priced in the nation. In all, 31 localities have index values exceeding the national average by 20 percent or more. At the other extreme, many of the lowest-priced localities are small Texas cities, or rural states or portions of states. The lowest index value is .71 for Odessa, Texas, although this value is based on prevailings accounting for only half of the expenditure weights of the complete set of procedures. Most localities, however, have weights which sum to .8 or higher. Thirty localities have index values of .8 or less. The subindex values generally also appear reasonable, with the possible exception of the radiology subindex, which is somewhat erratic. This is probably because it is based on only the two chest x-rays.

Table 5 presents correlations of the subindices with each other and with the overall index. the indices are highly intercorrelated, although the radiology subindex is less closely related to the other three. Again, this could be due to the fact that it is based on only two x-rays.

TABLE 5

CORRELATIONS OF PREVAILING CHARGE SUBINDICES WITH EACH OTHER AND OVERALL INDEX

|               | Radiology | Surgery | Medical | Consults |
|---------------|-----------|---------|---------|----------|
| Overall Index | .58       | .85     | .96     | .86      |
| Radiology     |           | .47     | .39     | .40      |
| Surgery       |           |         | .76     | .72      |
| Medical       |           |         |         | .84      |

Source: 1987 BERC Survey of Prevailing Charges.

## APPENDIX A

TABLE A-1  
CORRELATIONS OF 1984 DIRECTORY SPECIALIST PREVAILING CHARGES WITH FACTORS. BY PROCEDURE\*

\* STAGED RE-DEFINITIONS ARE GIVEN IN TABLE A-2

63-5-5 MEDICARE DIRECTOR) OF PREVAILING CHARGES 1764

TABLE A-2

## PROCEDURE DESCRIPTIONS FOR TABLE A-1

| Procedure | Procedure Description                |
|-----------|--------------------------------------|
| 1         | Initial Brief Office Visit           |
| 2         | Initial Limited Office Visit         |
| 3         | Initial Intermed Office Visit        |
| 4         | Initial Come Office Visit            |
| 5         | Minimal Followup Office Visit        |
| 6         | Brief Followup Office Visit          |
| 7         | Limited Followup Office Visit        |
| 8         | Intermediate Followup Office Visit   |
| 9         | Extended Followup Office Visit       |
| 10        | Comp Followup Office Visit           |
| 11        | Brief Followup Home Visit            |
| 12        | Limited Followup Home Visit          |
| 13        | Intermediate Followup Home Visit     |
| 14        | Extended Care Facility Visit         |
| 15        | Brief Followup Nursing Home Visit    |
| 16        | Initial Brief Hospital Visit         |
| 17        | Initial Intermediate Hospital Visit  |
| 18        | Initial Comp Hospital Visit          |
| 19        | Brief Followup Hospital Visit        |
| 20        | Limited Followup Hospital Visit      |
| 21        | Intermediate Followup Hospital Visit |
| 22        | Extended Followup Hospital Visit     |
| 23        | Brief Emergency Room Visit           |
| 24        | Limited Emergency Room Visit         |
| 25        | Intermediate Emergency Room Visit    |
| 26        | Limited Consultation                 |
| 27        | Extensive Consultation               |
| 28        | Comprehensive Consultation           |
| 29        | Psychotherapy-One Hour               |
| 30        | Psychotherapy-Half Hour              |
| 31        | Chiropractic Office Visit            |
| 32        | Initial Physiotherapy                |
| 33        | Followup Podiatric Office Visit      |
| 34        | Electrocardiogram (EKG)              |
| 35        | EKG-Interpret and Report Only        |
| 36        | Spirometry                           |
| 37        | Electroencephalogram (EEG)           |
| 38        | Chemotherapy                         |
| 39        | Collection of Specimens              |
| 40        | Debridement of Nails                 |
| 41        | Skin Biopsy                          |
| 42        | Chemocautery                         |
| 43        | Radical Mastectomy                   |
| 44        | Open Reduction of Fracture           |
| 45        | Arthrocentesis-Major Joint           |
| 46        | Coronary Artery Bypass               |
| 47        | Total Artificial Hip Replacement     |
| 48        | Needle Puncture of Bursa             |
| 49        | Bronchoscopy                         |
| 50        | Thoracentesis                        |
| 51        | Catherization of Heart               |
| 52        | Insertion of Pacemaker               |
| 53        | Partial Colectomy                    |
| 54        | Appendectomy                         |
| 55        | Sigmoidoscopy                        |
| 56        | Hemorrhoidectomy                     |
| 57        | Cholecystectomy                      |
| 58        | Repair Hernia                        |
| 59        | Diagnostic Cystourethroscopy         |
| 60        | Dilation of Urethra                  |
| 61        | Prostatectomy - Suprapubic           |
| 62        | Electrosection-Prostate (TUR)        |
| 63        | Hysterectomy                         |
| 64        | Initial Complete Eye Exam            |
| 65        | Comprehensive Eye Exam               |
| 66        | Eye Exam With Tonometry              |
| 67        | Extraction of Lens                   |
| 68        | Chest X-ray - Single View            |
| 69        | Chest X-ray - Two Views              |
| 70        | X-ray Spine                          |
| 71        | X-ray Hip                            |
| 72        | X-ray Upper GI Tract                 |
| 73        | X-ray Colon                          |
| 74        | Radiation Therapy - Low Volt         |
| 75        | Radiation Therapy - Super Volt       |
| 76        | Radiation Therapy - Megavolt         |
| 77        | Cat Scan - Head                      |
| 78        | Cat Scan - Abdomen                   |

TABLE A-3  
PROCEDURES INCLUDED IN SURGERY SUB-GROUPS

| Procedures                                 | HCPCS  |
|--|--|
| 1. Orthopedic Surgery                      | -----  |
| carpal tunnel                              | 64721  |
| hip replacements                           | 27130 -31  |
| femur fractures                            | 27236,244  |
| hip replacement                            | 27135  |
| ostectomy                                  | 27165  |
| bone graft                                 | 27170  |
| different types<br>of fractures            | many   |
| arthrocentesis                             | 20600,05,10  |
| arthroplasties                             | 24360 -63,<br>26530 -36,<br>23470,72,<br>27440 -27447,27486<br>21240 -21242<br>25445,6 |
| 2. Endoscopies                             | -----  |
| laryngoscopies                             | 31505 - 31575  |
| bronchoscopies                             | 31620 - 31659  |
| esophagus endoscopies                      | 43200 - 43227  |
| upper GI endoscopies                       | 43234 - 43239  |
| operative upper GI endoscopies             | 43245 - 43258  |
| endoscopic bile duct/pancreas              | 43250 - 43259  |
| small bowel endoscopies                    | 44360 - 44361  |
| colon endoscopies                          | 44398 - 44392  |
| sigmoidoscopies                            | 45300 - 45333  |
| colonoscopies                              | 45355 - 45385  |
| cystoscopies                               | 52000 -275,<br>52281 -315,<br>52320 -338   |
| shoulder arthroscopies                     | 52325 -338   |
| knee arthroscopies                         | 52980 - 29887  |
| arthroscopy of joint                       | 52909  |
| 3. CABGS                                   | -----  |
| repair & revision<br>of valves             | 33410-33483  |
| artery bypass<br>graft                     | 35501 - 35671  |
| removal & revision<br>of leg veins         | 37720-60   |
| biopsy, exploration,<br>treat lung lesion  | 32095-32141  |
| removal of chest<br>lining                 | 32310-20   |
| partial removal<br>of lung                 | 32480-32500  |
| removal of lung                            | 32440  |
| 4. Pacemakers and Cardiac Catheterizations | -----  |
| pacemakers                                 | 33220-33232  |
| cardiac<br>catheterizations                | 93501,3,10,11<br>26-28,46-49   |
| 5. General Surgeon Procedures              | -----  |
| hysterectomies                             | 58150-210,<br>58261-67   |
| D&C  | 58120  |
| gallbladder surgeries                      | 47620,5,10,<br>11,22   |
| mastectomies                               | 19140-240  |
| breast repairs                             | 23250-20   |
| explore abdomen                            | 49000-10   |
| appendectomies                             | 44950-60   |
| splenectomy                                | 38100  |
| colectomies                                | 44140-44146  |
| ileostomy                                  | 44310  |
| colostomy                                  | 44320-345  |
| breast surgeries                           | 19000-120  |
| repair bladder                             | 57240,260,286  |
| - & vagina                                 |  |
| remove ovaries                             | 58720-58945  |
| 6. Urologists' Procedures                  | -----  |
| TURPS                                      | 52601-52614  |
| suprapubic prostatectomy                   | 52621  |
| retropubic prostatectomies                 | 52631<br>52651<br>526810<br>526840<br>526845   |

Table A 4  
Prevailing charge index and sub-index values, by state and locality

| State | Carrier | Locality | Location                    | Radiology | Medical | Consults | Surgery | Sum of<br>Cost Shares | Overall<br>Index |
|-------|---------|----------|-----------------------------|-----------|---------|----------|---------|-----------------------|------------------|
|       |         |          |                             | Index     | Index   | Index    | Index   |                       |                  |
| AL    | 510     |          |                             |           |         |          |         |                       |                  |
|       |         | 01       | Northeast AL                | 1.02      | .88     | .84      | .84     | .8839                 | .88              |
|       |         | 02       | North Central AL            | 1.05      | .82     | .84      | .85     | .8812                 | .87              |
|       |         | 03       | Southeast AL                | 1.07      | .92     | .83      | .84     | .8990                 | .91              |
|       |         | 04       | Southwest AL                | 1.00      | .89     | .80      | .87     | .8885                 | .90              |
|       |         | 05       | Montgomery, AL              | 1.08      | 1.08    | .92      | .89     | .9012                 | .90              |
| AR    | 520     |          |                             |           |         |          |         |                       |                  |
|       |         | 13       | Arkansas                    | .93       | .79     | .98      | .90     | .9931                 | .88              |
| AS    | 1020    |          |                             |           |         |          |         |                       |                  |
|       |         | 01       | Alaska                      | .72       | 1.82    | 1.13     | 1.20    | .8795                 | 1.32             |
| AZ    | 1030    |          |                             |           |         |          |         |                       |                  |
|       |         | 01       | Phoenix (City), AZ          | .57       | 1.19    | 1.03     | 1.00    | .9987                 | 1.02             |
|       |         | 02       | Tucson (City), AZ           | .63       | 1.13    | .98      | .92     | .9987                 | .97              |
|       |         | 05       | Flagstaff (City), AZ        | 1.08      | 1.10    | 1.01     | .97     | .8034                 | 1.05             |
|       |         | 07       | Prescott (City), AZ         | 1.08      | 1.05    | 1.05     | 1.00    | .8203                 | 1.04             |
|       |         | 08       | Yuma (City), AZ             | .59       | 1.17    | .95      | 1.01    | .8747                 | 1.08             |
|       |         | 99       | Rural Arizona               | .67       | 1.10    | 1.04     | 1.01    | .8993                 | 1.00             |
| CA    | 542     |          |                             |           |         |          |         |                       |                  |
|       |         | 01       | N. Coastal Cnty., CA        | 1.20      | 1.27    | 1.13     | 1.12    | .9183                 | 1.20             |
|       |         | 02       | NE Rural CA                 | 1.10      | 1.26    | 1.11     | 1.18    | .9183                 | 1.20             |
|       |         | 03       | Marin/Napa/Solan, CA        | 1.20      | 1.27    | 1.11     | 1.21    | .9183                 | 1.23             |
|       |         | 04       | Sacramento/Surr. Cnty., CA  | 1.18      | 1.25    | 1.08     | 1.13    | .9183                 | 1.19             |
|       |         | 05       | San Francisco, CA           | 1.20      | 1.28    | 1.10     | 1.28    | .9058                 | 1.25             |
|       |         | 08       | San Mateo, CA               | .81       | 1.26    | 1.15     | 1.25    | .9175                 | 1.25             |
|       |         | 07       | Oakland-Berkeley, CA        | 1.16      | 1.24    | 1.08     | 1.17    | .9425                 | 1.19             |
|       |         | 08       | Stockton/Surr. Cnty., CA    | 1.14      | 1.22    | 1.07     | 1.13    | .9093                 | 1.17             |
|       |         | 09       | Santa Clara, CA             | .81       | 1.25    | 1.10     | 1.23    | .9189                 | 1.23             |
|       |         | 10       | Merced/Surr. Cnty., CA      | 1.14      | 1.23    | 1.07     | 1.16    | .9093                 | 1.19             |
|       |         | 11       | Fresno/Madera, CA           | 1.05      | 1.20    | 1.08     | 1.08    | .9093                 | 1.13             |
|       |         | 12       | Monteray/Santa Cruz, CA     | 1.18      | 1.24    | 1.10     | 1.14    | .8789                 | 1.18             |
|       |         | 13       | Kings/Tulare, CA            | 1.18      | 1.23    | 1.07     | 1.18    | .9093                 | 1.20             |
|       |         | 14       | Bakersfield, CA             | 1.21      | 1.28    | 1.09     | 1.16    | .9093                 | 1.21             |
|       |         | 15       | San Bernadino/E. Central CA | 1.20      | 1.38    | 1.23     | 1.04    | .9093                 | 1.27             |
|       |         | 97       | Riverelde, CA               | 1.22      | 1.37    | 1.28     | 1.31    | .9093                 | 1.32             |
| CA    | 8050    |          |                             |           |         |          |         |                       |                  |
|       |         | 16       | Santa Barbara, CA           | 1.38      | 1.35    | 1.19     | 1.31    | .9373                 | 1.33             |
|       |         | 17       | Ventura, CA                 | 1.38      | 1.38    | 1.31     | 1.28    | .8873                 | 1.33             |
|       |         | 18       | Los Angeles, CA (1st of 8)  | 1.19      | 1.43    | 1.32     | 1.42    | .8946                 | 1.39             |
|       |         | 19       | Los Angeles, CA (2nd of 8)  | 1.24      | 1.40    | 1.30     | 1.41    | .8946                 | 1.37             |
|       |         | 20       | Los Angeles, CA (3rd of 8)  | 1.21      | 1.43    | 1.35     | 1.34    | .8826                 | 1.37             |
|       |         | 21       | Los Angeles, CA (4th of 8)  | 1.22      | 1.40    | 1.29     | 1.36    | .8946                 | 1.38             |
|       |         | 22       | Los Angeles, CA (5th of 8)  | 1.30      | 1.47    | 1.39     | 1.45    | .8946                 | 1.43             |

Table A 4  
Prevailing charge index and sub-index values, by state and locality

| State | Carrier | Locality                      | Location | Radiology Index | Medical Index | Consults Index | Surgery Index | Sum of Cost Shares | Overall Index |
|-------|---------|-------------------------------|----------|-----------------|---------------|----------------|---------------|--------------------|---------------|
| CA    | 8050    |                               |          |                 |               |                |               |                    |               |
|       | 23      | Los Angeles, CA (6th of 8)    |          | 1.19            | 1.40          | 1.37           | 1.39          | .8048              | 1.37          |
|       | 24      | Los Angeles, CA (7th of 8)    |          | 1.18            | 1.48          | 1.34           | 1.35          | .9984              | 1.38          |
|       | 25      | Los Angeles, CA (8th of 8)    |          | 1.21            | 1.52          | 1.52           | 1.48          | .8948              | 1.48          |
|       | 26      | Anaheim-Santa Ana, CA         |          | 1.21            | 1.38          | 1.22           | 1.38          | .9213              | 1.34          |
|       | 28      | San Diego/Imperial, CA        |          | 1.20            | 1.31          | 1.21           | 1.23          | .9984              | 1.28          |
| CO    | 550     |                               |          |                 |               |                |               |                    |               |
|       | 01      | Colorado                      |          | .88             | .87           | .78            | .72           | .9974              | .80           |
| CT    | 3070    |                               |          |                 |               |                |               |                    |               |
|       | 01      | NW and N. Central Conn.       |          | 1.13            | 1.17          | 1.03           | .94           | .9987              | 1.07          |
|       | 02      | SW Connecticut                |          | 1.04            | 1.37          | 1.40           | 1.08          | .9149              | 1.22          |
|       | 03      | South Central Conn.           |          | 1.04            | 1.21          | 1.07           | .99           | .9987              | 1.09          |
|       | 04      | Eastern Conn.                 |          | .87             | 1.12          | 1.13           | .89           | .9144              | 1.01          |
| DC    | 580     |                               |          |                 |               |                |               |                    |               |
|       | 01      | D.C. & MD/VA Suburbs          |          | 1.02            | 1.28          | 1.04           | 1.15          | .8079              | 1.18          |
| DE    | 570     |                               |          |                 |               |                |               |                    |               |
|       | 01      | Delaware                      |          |                 | 1.03          | .86            | .98           | .7002              | 1.00          |
| FL    | 590     |                               |          |                 |               |                |               |                    |               |
|       | 01      | Rural Florida                 |          | 1.11            | 1.04          | .90            | 1.00          | .9983              | 1.02          |
|       | 02      | N/NC Florida Cities           |          | 1.11            | 1.11          | 1.02           | 1.02          | .9987              | 1.07          |
|       | 03      | Fort Lauderdale, FL           |          | 1.27            | 1.23          | 1.23           | 1.14          | .9976              | 1.20          |
|       | 04      | Miami, FL                     |          | 1.28            | 1.38          | 1.27           | 1.19          | .9987              | 1.27          |
| GA    | 15110   |                               |          |                 |               |                |               |                    |               |
|       | 01      | Atlanta, GA                   |          | 1.01            | 1.04          | 1.00           | .92           | .8702              | .99           |
|       | 02      | Small GA Cities 02            |          | .65             | .96           | .83            | .93           | .8715              | .91           |
|       | 03      | Small GA Cities 03            |          | .88             | .88           | .78            | .98           | .7919              | .89           |
|       | 04      | Rural Georgia                 |          | .90             | .82           | .73            | .92           | .7816              | .85           |
| HI    | 1120    |                               |          |                 |               |                |               |                    |               |
|       | 01      | Hawaii                        |          | .67             | 1.18          | 1.18           | 1.11          | .9897              | 1.09          |
| IA    | 640     |                               |          |                 |               |                |               |                    |               |
|       | 01      | SE Iowa (Excl. Iowa City)     |          | 1.01            | .72           | .91            | .77           | .8520              | .79           |
|       | 02      | Northeast Iowa                |          | 1.04            | .69           | .78            | .77           | .8681              | .78           |
|       | 03      | North Central Iowa            |          | .88             | .71           | .91            | .79           | .8645              | .78           |
|       | 04      | S. Cen. IA (Excl. Des Moines) |          | .99             | .71           | .88            | .78           | .8449              | .84           |
|       | 05      | Des Moines (Polk/Warren), IA  |          | .98             | .78           | 1.09           | .81           | .8595              | .84           |
|       | 06      | Northwest Iowa                |          | .98             | .72           | .84            | .81           | .8578              | .80           |

Table A-4  
Prevailing charge index and sub-index values, by state and locality

| state | Carrier | Locality                    | Location | Radiology<br>Index | Medical<br>Index | Consults<br>Index | Surgery<br>Index | Sum of<br>Cost Shares | Overall<br>Index |
|-------|---------|-----------------------------|----------|--------------------|------------------|-------------------|------------------|-----------------------|------------------|
| IA    | 640     |                             |          |                    |                  |                   |                  |                       |                  |
|       | 07      | Southwest Iowa              |          | .93                | .74              | .86               | .83              | .8024                 | .81              |
|       | 08      | Iowa City (City Limits), IA |          | .52                | 1.13             | .95               | .87              | .7111                 | .97              |
| ID    | 5130    |                             |          |                    |                  |                   |                  |                       |                  |
|       | 11      | South Idaho                 |          | 1.04               | .89              | .82               | .73              | .9086                 | .85              |
|       | 12      | North Idaho                 |          | .93                | .93              | .84               | .76              | .9043                 | .86              |
| IL    | 821     |                             |          |                    |                  |                   |                  |                       |                  |
|       | 01      | Northwest, IL               |          | .98                | .78              | .79               | 1.04             | .8313                 | .89              |
|       | 02      | Rockford, IL                |          | 1.00               | .91              | .70               | .90              | .9188                 | .94              |
|       | 03      | De Kalb, IL                 |          | .93                | .79              | .90               | .93              | .8369                 | .86              |
|       | 04      | Rock Island, IL             |          | 1.00               | .88              | .75               | .86              | .8389                 | .89              |
|       | 05      | Peoria, IL                  |          | 1.03               | .89              | .87               | .86              | .9188                 | .92              |
|       | 06      | Kankakee, IL                |          | .87                | .78              | .90               | .87              | .8382                 | .83              |
|       | 07      | Quincy, IL                  |          | 1.00               | .82              | .58               | .85              | .8424                 | .84              |
|       | 08      | Normal, IL                  |          | 1.02               | .79              | .87               | .93              | .8358                 | .85              |
|       | 09      | Springfield, IL             |          | 1.10               | .89              | .73               | .94              | .9161                 | .93              |
|       | 10      | Champaign-Urbana, IL        |          | .99                | .89              | .85               | .86              | .8609                 | .88              |
|       | 11      | Decatur, IL                 |          | .89                | .74              | .70               | .82              | .8978                 | .79              |
|       | 12      | East St. Louis, IL          |          | .87                | .85              | .88               | .86              | .9321                 | .88              |
|       | 13      | Southeast IL                |          | 1.08               | .85              | .71               | .95              | .8935                 | .91              |
|       | 14      | Southern IL                 |          | 1.03               | .80              | .74               | .86              | .7585                 | .86              |
|       | 15      | Suburban Chicago, IL        |          | 1.07               | 1.04             | 1.02              | 1.00             | .8445                 | 1.02             |
|       | 16      | Chicago, IL                 |          | 1.28               | 1.10             | 1.06              | 1.13             | .8445                 | 1.14             |
| IN    | 630     |                             |          |                    |                  |                   |                  |                       |                  |
|       | 01      | Metropolitan Indiana        |          | .99                | 1.01             | .87               | .94              | .9983                 | .97              |
|       | 02      | Urban Indiana               |          | .95                | .92              | .72               | .84              | .9833                 | .86              |
|       | 03      | Rural Indiana               |          | .86                | .82              | .72               | .82              | .9158                 | .82              |
| KS    | 650     |                             |          |                    |                  |                   |                  |                       |                  |
|       | 01      | Rural Kansas                |          | 1.06               | .91              | .85               | .83              | 1.0000                | .89              |
| KY    | 880     |                             |          |                    |                  |                   |                  |                       |                  |
|       | 01      | Lexington # Louisville, KY  |          | .96                | .97              | .98               | .86              | 1.0000                | .92              |
|       | 02      | SM Cities (City Limits), KY |          | .85                | .93              | .77               | .84              | 1.0000                | .87              |
|       | 03      | Rural Kentucky              |          | .85                | .83              | .75               | .82              | .9138                 | .82              |
| LA    | 528     |                             |          |                    |                  |                   |                  |                       |                  |
|       | 01      | New Orleans, LA             |          | 1.09               | .93              | .98               | .92              | .9931                 | .95              |
|       | 02      | Shreveport, LA              |          | 1.04               | .92              | 1.04              | .86              | .9931                 | .96              |
|       | 03      | Baton Rouge, LA             |          | 1.02               | .92              | .83               | .88              | .9905                 | .91              |
|       | 04      | Lake Charles, LA            |          | 1.06               | .79              | .78               | .87              | .9646                 | .85              |
|       | 05      | Monroe, LA                  |          | 1.09               | .83              | .82               | .89              | .9973                 | .86              |
|       | 06      | Lafayette, LA               |          | 1.01               | .85              | .82               | .85              | .9861                 | .87              |

Table A-4  
Prevailing charge index and sub-index values, by state and locality

| State | Carrier        | Locality                         | Location   | Radiology                                   | Medical                                 | Consults                               | Surgery                                | Sum of<br>Cost Shares                              | Overall<br>Index                        |
|-------|----------------|----------------------------------|--|---|---|--|--|--|---|
|       |                |                                  |  | Index                                       | Index                                   | Index                                  | Index                                  |  |   |
| LA    | 698            | 07<br>50                         | Alexandria, LA<br>Rural Louisiana *  | 1.00<br>1.00                                | .84<br>.75                              | .83<br>.78                             | .92<br>.89                             | .9690<br>.9101                                     | .89<br>.84                              |
|       |                |                                  |  |   |   |  |  |  |   |
| MA    | 700            | 01<br>02                         | Massachusetts Urban<br>Mass. Suburbs/Rural (Cities)  | 1.19<br>1.26                                | 1.08<br>.88                             | .81<br>.69                             | .97<br>.99                             | .9722<br>.8892                                     | 1.02<br>.95                             |
|       |                |                                  |  |   |   |  |  |  |   |
| MD    | 690            | 01<br>02<br>03                   | Baltimore/Surr. Cnty., MD<br>Western Maryland<br>South & E. Shore MD   | 1.17<br>1.05<br>1.08                        | 1.20<br>1.03<br>1.08                    | 1.08<br>.88<br>.88                     | 1.00<br>.98<br>.98                     | .9945<br>.9169<br>.9945                            | 1.11<br>1.01<br>1.01                    |
|       |                |                                  |  |   |   |  |  |  |   |
| ME    | 81800          | 01<br>02<br>03                   | Northern Maine<br>Central Maine<br>Southern Maine  | .89<br>.92<br>.98                           | .87<br>.90<br>1.01                      | .75<br>.87<br>.88                      | .88<br>.89<br>.90                      | .8337<br>.7583<br>.8413                            | .86<br>.88<br>.94                       |
|       |                |                                  |  |   |   |  |  |  |   |
| MI    | 710            | 01<br>02                         | Detroit, MI<br>Michigan, Not Detroit   | .88<br>.88                                  | 1.09<br>.92                             | .97<br>.88                             | .89<br>.87                             | 1.0000<br>1.0000                                   | .97<br>.89                              |
|       |                |                                  |  |   |   |  |  |  |   |
| MN    | 780            | 02<br>04                         | Northern Minnesota<br>Southern Minnesota   | .97<br>.95                                  | .81<br>.78                              | .94<br>.96                             | .85<br>.83                             | .9003<br>.8980                                     | .88<br>.83                              |
|       |                |                                  |  |   |   |  |  |  |   |
| 10840 | 01             |                                  | St. Paul-Minneapolis, MN *   | .90   | .89                                     | .88                                    | .84                                    | .9987  | .87                                     |
|       |                |                                  |  |   |   |  |  |  |   |
| MO    | 740            | 01<br>02<br>03<br>04<br>05<br>06 | St. Joseph, MO<br>N. K.C. (Clay/Platte), MO<br>K.C. (Jackson County), MO<br>Suburban Kansas City, KA<br>Kansas City, KA<br>Rural NW Counties, MO | 1.03<br>1.12<br>1.19<br>1.03<br>.77<br>1.00 | .78<br>.84<br>1.00<br>.89<br>.88<br>.71 | .81<br>.85<br>.91<br>.83<br>.88<br>.88 | .91<br>.94<br>.95<br>.95<br>.89<br>.91 | .9047<br>.9123<br>.9974<br>.9941<br>.9974<br>.9175 | .85<br>.82<br>1.00<br>.93<br>.87<br>.83 |
|       |                |                                  |  |   |   |  |  |  |   |
| 11280 | 01<br>02<br>03 |                                  | St. Louis/Lg E. Cities, MO<br>SM. E. Cities & Jeff. Cnty., MO<br>Rural (Excl. Rural NW) MO   | 1.05<br>.82<br>.86                          | .98<br>.85<br>.71                       | .94<br>.80<br>.76                      | .78<br>.74<br>.77                      | 1.0000<br>1.0000<br>.9169                          | .90<br>.80<br>.76                       |
|       |                |                                  |  |   |   |  |  |  |   |

Table A-4  
Prevailing charge index and sub-index values, by state and locality

| State | Carrier | Locality | Location                      | Radiology | Medical | Consulte | Surgery | Sum of<br>Coast Shares | Overall<br>Index |
|-------|---------|----------|-------------------------------|-----------|---------|----------|---------|------------------------|------------------|
|       |         |          |                               | Index     | Index   | Index    | Index   |                        |                  |
| MS    | 10280   |          |                               |           |         |          |         |                        |                  |
|       |         | 01       | Rural Mississippi             | .94       | .86     | .70      | .81     | .9041                  | .75              |
| MT    | 751     | 02       | Urban MS (City Limits)        | .91       | .74     | .71      | .78     | .9371                  | .78              |
|       |         | 01       | Montana                       | 1.05      | .97     | .79      | .81     | .9081                  | .91              |
| NC    | 13340   |          |                               |           |         |          |         |                        |                  |
|       |         | 04       | Urban (City Limite) NC        | .95       | 1.05    | .94      | .96     | .9326                  | 1.00             |
| ND    | 820     | 05       | Rural North Carolina          | .86       | .82     | .80      | .91     | .8879                  | .85              |
|       |         | 01       | North Dakota *                | 1.00      | .97     | .92      | .82     | .9175                  | .92              |
| NE    | 645     |          |                               |           |         |          |         |                        |                  |
|       |         | 01       | Omaha & Lincoln, NE           | 1.12      | .88     | .79      | .75     | .9498                  | .86              |
| NH    | 780     | 03       | Urban (Cnty. Pop. 25000) NE   | .98       | .88     | .77      | .74     | .7222                  | .74              |
|       |         | 04       | Rural Nebraska                | .88       | .74     | .70      | .70     | .8768                  | .74              |
| NJ    | 13310   |          |                               |           |         |          |         |                        |                  |
|       |         | 40       | New Hampshire                 | .91       | .86     | .78      | .86     | .9818                  | .88              |
| NM    | 6380    |          |                               |           |         |          |         |                        |                  |
|       |         | 01       | New Mexico *                  | .45       | 1.03    | 1.02     | .98     | .9848                  | .98              |
| NV    | 1290    |          |                               |           |         |          |         |                        |                  |
|       |         | 01       | Las Vegas, et al (Cities), NV | .84       | 1.37    | 1.10     | 1.19    | .9253                  | 1.22             |
| NY    | 801     | 03       | Elko & Ely (Cities), NV       | .83       | 1.27    | 1.05     | 1.29    | .8887                  | 1.19             |
|       |         | 99       | Rural Nevada                  | .69       | 1.21    | 1.15     | 1.39    | .6834                  | 1.14             |
| NY    | 801     |          |                               |           |         |          |         |                        |                  |
|       |         | 01       | Buffalo/Surr. Cnty., NY       | .93       | 1.04    | .88      | .87     | 1.0000                 | .95              |
| NY    | 801     | 02       | Rochester/Surr. Cnty., NY     | 1.06      | 1.07    | .89      | .86     | .9897                  | 1.00             |
|       |         | 03       | N. Central Cities, NY         | 1.15      | 1.07    | .81      | .93     | .9993                  | 1.01             |
| NY    | 801     | 04       | Rural New York                | 1.07      | .99     | .78      | .88     | 1.0000                 | .94              |

Table A-4  
Prevailing charge index and sub-index values, by state and locality

| State | Carrier                       | Locality | Location | Radiology | Medical | Consults | Surgery | Sum of<br>Cost Share | Overall<br>Index |
|-------|-------------------------------|----------|----------|-----------|---------|----------|---------|----------------------|------------------|
|       |                               |          |          | Index     | Index   | Index    | Index   |                      |                  |
| NY    | 803                           |          |          |           |         |          |         |                      |                  |
| 01    | Manhattan, NY                 |          |          | 1.52      | 1.87    | 1.24     | 1.69    | .9786                | 1.64             |
| 02    | NYC Suburbs/Long I., NY       |          |          | 1.53      | 1.25    | 1.14     | 1.37    | .9799                | 1.53             |
| 03    | Foughkpele/W. NYC Suburbs     |          |          | 1.23      | .99     | 1.03     | 1.81    | .9189                | 1.11             |
| 14330 |                               |          |          |           |         |          |         |                      |                  |
| 04    | Queens, NY                    |          |          | 1.53      | 1.25    | 1.14     | 1.37    | .9799                | 1.53             |
| OH    | 18360                         |          |          |           |         |          |         |                      |                  |
| 01    | Akron, OH                     |          |          | 1.16      | 1.08    | .96      | .97     | .9591                | 1.03             |
| 02    | Cincinnati, OH                |          |          | 1.07      | 1.03    | 1.04     | .93     | .9577                | .99              |
| 03    | Cleveland, OH                 |          |          | 1.10      | 1.14    | 1.15     | 1.08    | .9648                | 1.11             |
| 04    | Columbus, OH                  |          |          | 1.08      | 1.08    | .96      | 1.05    | .9608                | 1.05             |
| 05    | Dayton, OH                    |          |          | .96       | 1.03    | .90      | 1.00    | .9812                | 1.00             |
| 06    | Northwest (Lima), OH          |          |          | 1.08      | .93     | .99      | .99     | .9587                | .98              |
| 07    | Massfield, OH                 |          |          | .81       | .98     | .95      | .88     | .8732                | .92              |
| 08    | Springfield, OH               |          |          | .93       | 1.08    | 1.03     | .90     | .8882                | .97              |
| 09    | E. Central (Steubenville), OH |          |          | .89       | .96     | .87      | .95     | .8818                | .95              |
| 10    | Toledo (Lucas/Wood), OH       |          |          | 1.09      | 1.01    | 1.04     | 1.04    | .9026                | 1.04             |
| 11    | Youngstown, OH                |          |          | 1.12      | 1.05    | .99      | 1.08    | .9845                | 1.06             |
| 12    | W. Central (Lake Erie), OH    |          |          | .98       | .98     | 1.00     | .86     | .9024                | .90              |
| 13    | Marion # Eurr. Cnty., OH      |          |          | .88       | .97     | .93      | 1.00    | .9109                | .97              |
| 14    | Scioto Valley, OH             |          |          | 1.12      | .95     | .92      | .94     | .9043                | .97              |
| 15    | Southeast (Ohio Valley), OH   |          |          | 1.04      | .92     | .95      | 1.00    | .8981                | .97              |
| OK    | 1370                          |          |          |           |         |          |         |                      |                  |
| 01    | OK city, et al (Cities), OK   |          |          | .51       | .97     | .75      | .88     | .9890                | .86              |
| 02    | Tulsa, et al (Cities), OK     |          |          | .50       | .99     | .87      | .92     | .9890                | .90              |
| 03    | Sm. Cities (Southern), OK     |          |          | .49       | .85     | .73      | .78     | .9060                | .77              |
| 04    | Sm. Cities (Northern), OK     |          |          | .49       | .91     | .74      | .80     | .9037                | .80              |
| 99    | Rural Oklahoma                |          |          | .64       | .75     | .68      | .84     | .8952                | .76              |
| OR    | 1380                          |          |          |           |         |          |         |                      |                  |
| 01    | Portland, et al (Cities), OR  |          |          | .58       | .98     | .87      | .85     | .9865                | .87              |
| 02    | Eugene, et al (Cities), OR    |          |          | .64       | 1.00    | .83      | .83     | .9124                | .88              |
| 03    | Salem, et al (Cities), OR     |          |          | .88       | .97     | .81      | .79     | .9048                | .86              |
| 12    | SW OR Cities (City Limits)    |          |          | .59       | .95     | .86      | .81     | .9297                | .85              |
| 99    | Rural Oregon                  |          |          | .55       | .97     | .80      | .84     | .8921                | .86              |
| PA    | 865                           |          |          |           |         |          |         |                      |                  |
| 01    | Pilly/Pitt Med Sche/Hoops     |          |          | 1.36      | 1.33    | .97      | 1.08    | .9836                | 1.21             |
| 02    | LG Pennsylvania Cities        |          |          | 1.40      | 1.17    | .93      | 1.08    | .9838                | 1.13             |
| 03    | Small Pennsylvania Cities     |          |          | 1.84      | 1.03    | .85      | .97     | .9636                | 1.04             |
| 04    | Rural Pennsylvania            |          |          | 1.35      | 1.01    | .79      | .98     | .8850                | 1.01             |

Table A 4  
Prevailing charge index and sub index values, by state and locality

| State | Carrier | Locality | Location              | Radiology Index | Medical Index | Consults Index | Surgery Index | Sum of Cost Shares | Overall Index |
|-------|---------|----------|-----------------------|-----------------|---------------|----------------|---------------|--------------------|---------------|
| RI    | 870     | 01       | Rhode Island *        | .89             | 1.05          | .88            | .93           | .9987              | .97           |
| SC    | 880     | 01       | South Carolina        | .98             | .73           | .73            | .82           | .9931              | .80           |
| SD    | 820     | 02       | South Dakota          | .82             | .81           | .58            | .78           | .8909              | .78           |
| TN    | 5440    | 35       | Tennessee             | .94             | .85           | .88            | .80           | .9971              | .84           |
| TX    | 900     | 02       | Northeast Rural Texas | 1.05            | .81           | .87            | .98           | .9949              | .90           |
|       |         | 03       | Southeast Rural Texas | 1.12            | .88           | .81            | 1.02          | .9490              | .98           |
|       |         | 04       | Western Rural Texas   | .96             | .81           | .79            | .97           | .9630              | .89           |
|       |         | 06       | Temple, TX            | .91             | .71           | .60            | .65           | .5399              | .75           |
|       |         | 07       | San Antonio, TX       | .96             | 1.00          | .88            | 1.02          | .9203              | 1.00          |
|       |         | 08       | Texarkana, TX         | .75             | .74           | .81            | .72           | .5726              | .75           |
|       |         | 09       | Brazoria, TX          | 1.00            | .70           | .              | .             | .5067              | .78           |
|       |         | 10       | Brownsville, TX       | .78             | .75           | .73            | .90           | .6284              | .77           |
|       |         | 11       | Dallas, TX            | 1.10            | 1.08          | .91            | 1.04          | .9733              | 1.05          |
|       |         | 12       | Denton, TX            | 1.04            | .83           | .84            | .             | .5778              | .86           |
|       |         | 13       | Odessa, TX            | .83             | .87           | .              | .             | .5028              | .71           |
|       |         | 14       | El Paso, TX           | .82             | .82           | .84            | 1.14          | .7327              | .88           |
|       |         | 15       | Galveston, TX         | 1.26            | 1.05          | .94            | 1.10          | .8542              | 1.09          |
|       |         | 16       | Grayson, TX           | .85             | .75           | .53            | .71           | .5857              | .75           |
|       |         | 17       | Longview, TX          | .98             | .71           | .74            | .84           | .5788              | .77           |
|       |         | 18       | Houston, TX           | 1.13            | .99           | 1.00           | 1.08          | .9703              | 1.04          |
|       |         | 19       | McAllen, TX           | 1.14            | .71           | .80            | .99           | .6287              | .81           |
|       |         | 20       | Beaumont, TX          | 1.18            | .88           | .80            | .91           | .7691              | .92           |
|       |         | 21       | Lubbock, TX           | .99             | .90           | .77            | .95           | .8753              | .91           |
|       |         | 22       | Waco, TX              | .85             | .77           | .75            | 1.41          | .5780              | .80           |
|       |         | 23       | Midland, TX           | 1.01            | .77           | .              | .             | .4814              | .83           |
|       |         | 24       | Corpus Christi, TX    | 1.11            | .98           | .83            | 1.00          | .7302              | .99           |
|       |         | 25       | Orange, TX            | 1.05            | .77           | .              | .             | .5098              | .84           |
|       |         | 26       | Amarillo, TX          | 1.17            | .84           | .88            | .77           | .6176              | .91           |
|       |         | 27       | Tyler, TX             | 1.04            | .95           | .80            | .86           | .6187              | .95           |
|       |         | 28       | Fort Worth, TX        | .99             | .87           | .85            | .97           | .8734              | .92           |
|       |         | 29       | Abilene, TX           | .92             | .78           | .72            | .             | .5592              | .77           |
|       |         | 30       | San Angelo, TX        | .87             | .95           | .98            | 1.01          | .5399              | .94           |
|       |         | 31       | Austin, TX            | 1.09            | .98           | .90            | .95           | .7292              | .99           |
|       |         | 33       | Laredo, TX            | 1.02            | .88           | .              | .             | .4197              | .72           |
|       |         | 34       | Wichita Falls, TX     | .88             | .80           | .82            | 1.73          | .5884              | .83           |
| UT    | 910     | 01       | Utah                  | .93             | .86           | .82            | .78           | .9758              | .83           |

Table A-4  
Prevailing charge index and sub-index values, by state and locality

| State | Carrier | Locality                        | Location | Radiology Index | Medical Index | Consults Index | Surgery Index | Sum of Cost Shares | Overall Index |
|-------|---------|---------------------------------|----------|-----------------|---------------|----------------|---------------|--------------------|---------------|
| VA    | 10490   |                                 |          |                 |               |                |               |                    |               |
|       | 01      | Richmond & Charlottesville, VA  |          | .95             | .98           | .82            | .86           | .8970              | .91           |
|       | 02      | Tidewater & N. VA Counties      |          | .94             | .89           | .89            | .92           | .8970              | .91           |
|       | 03      | Sm Town/Industrial VA           |          | .94             | .74           | .75            | .81           | .8970              | .79           |
|       | 04      | Rural Virginia                  |          | .92             | .70           | .86            | .71           | .8153              | .74           |
| VT    | 780     |                                 |          |                 |               |                |               |                    |               |
|       | 50      | Vermont                         |          |                 | .84           | .75            | .88           | .5805              | .85           |
| WA    | 930     |                                 |          |                 |               |                |               |                    |               |
|       | 01      | W & SE WA (Excl. Seattle)       |          | 1.08            | 1.02          | .93            | .94           | .9849              | .99           |
|       | 03      | Spokane & Richland (Cities), WA |          | 1.05            | 1.05          | .82            | .78           | .8858              | .94           |
|       | 04      | E. Cen & NE WA (Excl. Spokane)  |          | .99             | .98           | .84            | .58           | .5917              | .97           |
| WI    | 051     |                                 |          |                 |               |                |               |                    |               |
|       | 04      | Milwaukee, WI                   |          | 1.08            | 1.04          | .94            | .95           | .9722              | 1.00          |
|       | 12      | Northwest Wisconsin             |          | .92             | .83           | .77            | .80           | .8344              | .84           |
|       | 13      | Central Wisconsin               |          | .94             | .78           | .89            | 1.15          | .8058              | .83           |
|       | 14      | Southwest Wisconsin             |          | .85             | .79           | .88            | .83           | .8115              | .81           |
|       | 15      | Madison, WI (Dane County)       |          | 1.01            | .97           | .88            | .85           | .9085              | .93           |
|       | 19      | La Crosse, WI (W-Central)       |          | .90             | .90           | .85            | .95           | .8815              | .91           |
|       | 38      | Wausau, WI (N-Central)          |          | 1.01            | .97           | .83            | .90           | .8490              | .94           |
|       | 40      | Green Bay, WI (Northeast)       |          | .94             | .86           | .88            | .93           | .8911              | .90           |
|       | 48      | Milwaukee Suburbs, WI (SE)      |          | 1.03            | 1.00          | .88            | .98           | .8858              | .99           |
|       | 54      | Janesville, WI (S-Central)      |          | .97             | .91           | .79            | .97           | .8120              | .93           |
|       | 80      | Oshkosh, WI (E-Central)         |          | .91             | .95           | .85            | .89           | .8688              | .98           |
| WV    | 16510   |                                 |          |                 |               |                |               |                    |               |
|       | 18      | Charleston, WV                  |          | .94             | 1.07          | .98            | 1.00          | .9885              | 1.02          |
|       | 17      | Wheeling, WV                    |          | .94             | 1.05          | .99            | .93           | .9721              | .99           |
|       | 18      | Eastern Valley, WV              |          | .88             | .95           | .99            | 1.09          | .9139              | .99           |
|       | 19      | Ohio River Valley, WV           |          | 1.03            | .97           | .99            | .89           | .9030              | .95           |
|       | 20      | Southern Valley, WV             |          | .90             | 1.05          | .89            | .95           | .8975              | .98           |
| WY    | 8530    |                                 |          |                 |               |                |               |                    |               |
|       | 08      | Wyoming                         |          |                 | .87           | .92            | 1.08          | .8910              | .86           |

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Table A-5  
Prevailing charge index and sub-index values,  
by state and locality, ranked in descending order of overall index

| State | Carrier | Locality | Location                       | Radiology Index | Medical Index | Consults Index | Surgery Index | Sum of Cost Shares | Overall Index |
|-------|---------|----------|--------------------------------|-----------------|---------------|----------------|---------------|--------------------|---------------|
| NY    | 803     | 01       | Manhattan, NY                  | 1.52            | 1.87          | 1.24           | 1.69          | .9786              | 1.64          |
| CA    | 8050    | 05       | Los Angeles, CA (8th of 8)     | 1.21            | 1.52          | 1.46           | .8948         | 1.46               |               |
| CA    | 8050    | 08       | Los Angeles, CA (5th of 8)     | 1.30            | 1.47          | 1.39           | 1.45          | .8948              | 1.43          |
| CA    | 8050    | 16       | Los Angeles, CA (1st of 8)     | 1.19            | 1.43          | 1.32           | 1.40          | .8948              | 1.39          |
| CA    | 8050    | 04       | Los Angeles, CA (7th of 8)     | 1.18            | 1.46          | 1.34           | 1.35          | .9964              | 1.38          |
| CA    | 8050    | 19       | Los Angeles, CA (2nd of 8)     | 1.04            | 1.40          | 1.30           | 1.41          | .8948              | 1.37          |
| CA    | 8050    | 00       | Los Angeles, CA (3rd of 8)     | 1.01            | 1.43          | 1.38           | 1.34          | .8828              | 1.37          |
| CA    | 8050    | 23       | Los Angeles, CA (6th of 8)     | 1.19            | 1.40          | 1.37           | 1.39          | .8948              | 1.37          |
| CA    | 8050    | 01       | Los Angeles, CA (4th of 8)     | 1.22            | 1.40          | 1.29           | 1.38          | .8948              | 1.38          |
| CA    | 8050    | 26       | Anaheim-Santa Ana, CA          | 1.21            | 1.38          | 1.22           | 1.36          | .9213              | 1.34          |
| NY    | 803     | 08       | NYC Suburbs/Long Island, NY    | 1.53            | 1.25          | 1.14           | 1.37          | .9799              | 1.33          |
| NY    | 14330   | 04       | Queens, NY                     | 1.53            | 1.25          | 1.14           | 1.37          | .9799              | 1.33          |
| CA    | 8050    | 17       | Ventura, CA                    | 1.36            | 1.36          | 1.31           | 1.98          | .8873              | 1.33          |
| CA    | 8050    | 16       | Santa Barbara, CA              | 1.38            | 1.35          | 1.19           | 1.31          | .9373              | 1.33          |
| CA    | 542     | 07       | Riverside, CA                  | 1.22            | 1.37          | 1.26           | 1.31          | .9003              | 1.32          |
| AS    | 1080    | 01       | Alaska                         | .72             | 1.68          | 1.13           | 1.80          | .8795              | 1.32          |
| FL    | 500     | 04       | Miami, FL                      | 1.26            | 1.36          | 1.07           | 1.19          | .9987              | 1.27          |
| CA    | 542     | 15       | San Bernardino/E. Central CA   | 1.80            | 1.38          | 1.23           | 1.94          | .9093              | 1.27          |
| CA    | 8050    | 28       | San Diego/Imperial, CA         | 1.20            | 1.31          | 1.21           | 1.93          | .9984              | 1.26          |
| CA    | 542     | 06       | San Mateo, CA                  | 1.21            | 1.28          | 1.15           | 1.95          | .9175              | 1.25          |
| CA    | 542     | 05       | San Francisco, CA              | 1.20            | 1.26          | 1.10           | 1.98          | .9958              | 1.25          |
| CA    | 542     | 03       | Marin/Napa/Sonoma, CA          | 1.20            | 1.27          | 1.11           | 1.21          | .9183              | 1.23          |
| CA    | 542     | 09       | Santa Clara, CA                | 1.21            | 1.25          | 1.10           | 1.93          | .9162              | 1.23          |
| CT    | 3070    | 02       | SW Connecticut                 | 1.04            | 1.37          | 1.40           | 1.06          | .9149              | 1.22          |
| NV    | 1200    | 01       | Las Vegas, et al (Cities), NV  | .84             | 1.37          | 1.10           | 1.19          | .9253              | 1.22          |
| CA    | 542     | 14       | Bakersfield, CA                | 1.21            | 1.28          | 1.09           | 1.14          | .9093              | 1.21          |
| PA    | 865     | 01       | Pittly/Pitt Med Sch/Erie/Hoppe | 1.36            | 1.33          | .97            | 1.08          | .9636              | 1.21          |
| CA    | 542     | 01       | N. Coastal Cnty's, CA          | 1.20            | 1.27          | 1.13           | 1.12          | .9183              | 1.20          |
| CA    | 542     | 13       | King/Tulare, CA                | 1.18            | 1.23          | 1.07           | 1.18          | .9093              | 1.20          |
| CA    | 542     | 02       | NE Rural CA                    | 1.10            | 1.26          | 1.11           | 1.14          | .9183              | 1.20          |
| FL    | 500     | 03       | Fort Lauderdale, FL            | 1.27            | 1.23          | 1.23           | 1.14          | .9076              | 1.20          |
| CA    | 542     | 07       | Oakland-Berkeley, CA           | 1.16            | 1.24          | 1.08           | 1.17          | .9425              | 1.19          |
| CA    | 542     | 10       | Merced/Surr. Cnty's, CA        | 1.14            | 1.23          | 1.07           | 1.18          | .9093              | 1.19          |
| NV    | 1200    | 03       | Zelko # Ely (Cities), NV       | .83             | 1.27          | 1.05           | 1.29          | .6687              | 1.19          |
| CA    | 542     | 04       | Sacramento/Surr. Cnty's, CA    | 1.16            | 1.25          | 1.08           | 1.13          | .9183              | 1.19          |
| DC    | 580     | 01       | D.C. # MD/VA Suburbs           | 1.02            | 1.26          | 1.04           | 1.15          | .8079              | 1.18          |
| CA    | 542     | 12       | Monterey/Santa Cruz, CA        | 1.18            | 1.24          | 1.10           | 1.14          | .8789              | 1.18          |
| CA    | 542     | 06       | Stockton/Surr. Cnty's, CA      | 1.14            | 1.22          | 1.07           | 1.13          | .9093              | 1.17          |
| NJ    | 13310   | 01       | Northern New Jersey            | 1.18            | 1.18          | 1.13           | 1.14          | 1.0000             | 1.16          |
| NV    | 1200    | 99       | Rural Nevada                   | .69             | 1.21          | 1.15           | 1.39          | .6834              | 1.14          |
| IL    | 621     | 16       | Chicago, IL                    | 1.28            | 1.10          | 1.06           | 1.13          | .8448              | 1.14          |
| CA    | 848     | 11       | Fresno/Madera, CA              | 1.05            | 1.20          | 1.08           | 1.08          | .9093              | 1.13          |
| PA    | 865     | 02       | LG Pennsylvania Cities         | 1.40            | 1.17          | .93            | 1.02          | .9636              | 1.13          |
| OH    | 16300   | 03       | Cleveland, OH                  | 1.10            | 1.14          | 1.15           | 1.08          | .9648              | 1.11          |
| MD    | 690     | 01       | Baltimore/Surr. Cnty's, MD     | 1.17            | 1.20          | 1.08           | 1.00          | .9945              | 1.11          |
| NY    | 803     | 03       | Roughkpele/N. NYC Suburbs      | 1.23            | .99           | 1.03           | 1.21          | .9189              | 1.11          |
| CT    | 3070    | 03       | South Central Conn.            | 1.04            | 1.21          | 1.07           | .99           | .9987              | 1.09          |
| TX    | 900     | 15       | Galveston, TX                  | 1.26            | 1.05          | .94            | 1.10          | .6542              | 1.09          |
| HI    | 1100    | 01       | Hawaii                         | .67             | 1.18          | 1.18           | 1.11          | .9897              | 1.09          |
| NJ    | 13310   | 08       | Middle New Jersey              | 1.14            | 1.05          | .97            | 1.11          | 1.0000             | 1.08          |
| FL    | 500     | 08       | N/W Florida Cities             | 1.11            | 1.11          | 1.08           | 1.08          | .9987              | 1.07          |
| CT    | 3070    | 01       | NW and N. Central Conn.        | 1.13            | 1.17          | 1.03           | .94           | .9987              | 1.07          |

Table A-5  
Prevailing charge index and sub-index values,  
by state and locality, ranked in descending order of overall index

| State | Carrier | Locality | Location                       | Radiology<br>Index | Medical<br>Index | Consults<br>Index | Surgery<br>Index | Sum of<br>Cost Shares | Overall<br>Index |
|-------|---------|----------|--------------------------------|--------------------|------------------|-------------------|------------------|-----------------------|------------------|
| OH    | 16380   | 11       | Youngstown, OH                 | 1.19               | 1.03             | .99               | 1.08             | .9845                 | 1.08             |
| TX    | 900     | 11       | Dallas, TX                     | 1.10               | 1.08             | .91               | 1.04             | .9733                 | 1.05             |
| AZ    | 1030    | 05       | Flagstaff (City), AZ           | 1.08               | 1.10             | 1.01              | .97              | .8034                 | 1.05             |
| OH    | 16380   | 04       | Columbus, OH                   | 1.02               | 1.08             | .96               | 1.05             | .9808                 | 1.05             |
| TX    | 900     | 18       | Houston, TX                    | 1.13               | .99              | 1.00              | 1.08             | .9763                 | 1.04             |
| AZ    | 1030    | 07       | Prescott (City), AZ            | 1.08               | 1.05             | 1.05              | 1.00             | .8203                 | 1.04             |
| OH    | 16380   | 10       | Toledo (Lucas/Wood), OH        | 1.09               | 1.01             | 1.04              | 1.04             | .9626                 | 1.04             |
| OH    | 16380   | 01       | Akron, OH                      | 1.18               | 1.08             | .98               | .97              | .9591                 | 1.03             |
| NJ    | 13310   | 03       | Southern New Jersey            | 1.17               | .97              | .95               | 1.06             | .9987                 | 1.03             |
| AZ    | 1030    | 01       | Phoenix (City), AZ             | .57                | 1.19             | 1.03              | 1.00             | .9967                 | 1.02             |
| MA    | 700     | 01       | Massachusetts Urban            | 1.19               | 1.08             | .81               | .97              | .9722                 | 1.02             |
| IL    | 681     | 16       | Suburban Chicago, IL           | 1.07               | 1.04             | 1.02              | 1.00             | .8445                 | 1.02             |
| FL    | 590     | 01       | Rural Florida                  | 1.11               | 1.04             | .90               | 1.00             | .9983                 | 1.02             |
| PA    | 865     | 03       | Small Pennsylvania Cities      | 1.84               | 1.03             | .85               | .97              | .9636                 | 1.02             |
| AZ    | 1030    | 08       | Yuma (City), AZ                | .59                | 1.17             | .95               | 1.01             | .8747                 | 1.02             |
| WV    | 16310   | 16       | Charleston, WV                 | .94                | 1.07             | .96               | 1.00             | .9885                 | 1.02             |
| PA    | 865     | 04       | Rural Pennsylvania             | 1.35               | 1.01             | .79               | .92              | .8850                 | 1.01             |
| MD    | 690     | 03       | South & E Shore MD             | 1.08               | 1.06             | .85               | .96              | .9945                 | 1.01             |
| NY    | 801     | 03       | N. Central Cities, NY          | 1.15               | 1.07             | .81               | .93              | .9993                 | 1.01             |
| CT    | 3070    | 04       | Eastern Conn.                  | .87                | 1.12             | 1.13              | .89              | .9144                 | 1.01             |
| MD    | 890     | 02       | Western Maryland               | 1.05               | 1.03             | .86               | .98              | .9189                 | 1.01             |
| AZ    | 1030    | 09       | Rural Arizona                  | .87                | 1.10             | 1.04              | 1.01             | .8993                 | 1.00             |
| NY    | 801     | 02       | Rochester/Surr. Cnty., NY      | 1.28               | 1.07             | .89               | .86              | .9997                 | 1.00             |
| OH    | 16380   | 05       | Dayton, OH                     | .98                | 1.03             | .90               | 1.00             | .9812                 | 1.00             |
| NC    | 13340   | 94       | Urban (City Limits) NC         | .95                | 1.05             | .94               | .98              | .9328                 | 1.00             |
| MO    | 740     | 03       | K. C. (Jackson County), MO     | 1.10               | 1.00             | .91               | .95              | .9974                 | 1.00             |
| WI    | 951     | 04       | Milwaukee, WI                  | 1.04               | 1.04             | .94               | .95              | .9722                 | 1.00             |
| DE    | 570     | 01       | Delaware                       | —                  | 1.03             | .86               | .96              | .7002                 | 1.00             |
| TX    | 900     | 07       | San Antonio, TX                | .98                | 1.00             | .88               | 1.02             | .9203                 | 1.00             |
| AL    | 510     | 05       | Montgomery, AL                 | 1.06               | 1.06             | .92               | .89              | .9012                 | .99              |
| OH    | 16380   | 02       | Cincinnati, OH                 | 1.07               | 1.03             | 1.04              | .93              | .9577                 | .99              |
| GA    | 13110   | 01       | Atlanta, GA                    | 1.01               | 1.04             | 1.00              | .92              | .8702                 | .99              |
| TX    | 900     | 24       | Corpus Christi, TX             | 1.11               | .96              | .83               | 1.00             | .7302                 | .99              |
| WV    | 16310   | 18       | Eastern Valley, WV             | .86                | .95              | .99               | 1.09             | .9139                 | .99              |
| WI    | 951     | 46       | Milwaukee Suburbs, WI (SE)     | 1.05               | 1.00             | .86               | .98              | .8638                 | .99              |
| WA    | 950     | 01       | W & SE WA (Excl. Seattle)      | 1.06               | 1.02             | .93               | .94              | .9849                 | .99              |
| WV    | 16310   | 17       | Wheeling, WV                   | .94                | 1.05             | .99               | .93              | .9721                 | .99              |
| TX    | 900     | 31       | Austin, TX                     | 1.09               | .98              | .90               | .95              | .7292                 | .99              |
| WV    | 16310   | 20       | Southern Valley, WV            | .90                | 1.05             | .89               | .95              | .6975                 | .98              |
| OH    | 16360   | 06       | Northwest (Lima), OH           | 1.06               | .93              | .99               | .99              | .9587                 | .98              |
| AZ    | 1030    | 02       | Tucson (City), AZ              | .83                | 1.13             | .98               | .92              | .9967                 | .97              |
| MI    | 710     | 01       | Detroit, MI                    | .88                | 1.09             | .97               | .89              | 1.0000                | .97              |
| RI    | 870     | 01       | Rhode Island                   | .89                | 1.05             | .88               | .93              | .9987                 | .97              |
| IN    | 830     | 01       | Metropolitad Indiana           | .99                | 1.01             | .87               | .94              | .9983                 | .97              |
| OH    | 16380   | 08       | Springfield, OH                | .93                | 1.02             | 1.03              | .90              | .8882                 | .97              |
| OH    | 16380   | 14       | Scioto Valley, OH              | 1.12               | .95              | .92               | .94              | .9043                 | .97              |
| WA    | 950     | 04       | E. Cen & NE WA (Excl. Spokane) | .99                | .98              | .84               | .58              | .5917                 | .97              |
| OH    | 16380   | 13       | Marion & Burr. Cnty., OH       | .88                | .97              | .93               | 1.00             | .9109                 | .97              |
| IA    | 840     | 08       | Iowa City (City Limits), IA    | .92                | 1.13             | .95               | .87              | .7111                 | .97              |
| OH    | 16380   | 15       | Southeast (Ohio Valley), OH    | 1.04               | .98              | .95               | 1.00             | .8961                 | .97              |
| TX    | 900     | 03       | Southeast Rural Texas          | 1.12               | .88              | .81               | 1.08             | .9490                 | .98              |
| OH    | 16380   | 09       | E. Central (Steubenville), OH  | .89                | .98              | .87               | .95              | .8818                 | .95              |

Table A-5  
Prevailing charge index and sub-index values,  
by state and locality, ranked in descending order of overall index

| State | Carrier | Locality | Location                       | Radiology Index | Medical Index | Consults Index | Surgery Index | Sum of Cost Shares | Overall Index |
|-------|---------|----------|--------------------------------|-----------------|---------------|----------------|---------------|--------------------|---------------|
| TX    | 900     | 27       | Tyler, TX                      | 1.04            | .95           | .80            | .88           | .8187              | .95           |
| MA    | 700     | 02       | Mass. Suburbs/Rural (Cities)   | 1.06            | .88           | .80            | .90           | .8892              | .95           |
| WV    | 18510   | 19       | Ohio River Valley, WV          | 1.03            | .97           | .90            | .89           | .9030              | .95           |
| NY    | 801     | 01       | Buffalo/Surr. Cityte., NY      | .93             | 1.04          | .86            | .87           | 1.0000             | .95           |
| LA    | 528     | 01       | New Orleans, LA                | 1.09            | .93           | .92            | .92           | .9931              | .95           |
| WI    | 951     | 38       | Wausau, WI (N-Central)         | 1.01            | .97           | .83            | .90           | .8490              | .94           |
| TX    | 900     | 30       | San Angelo, TX                 | .87             | .95           | .98            | 1.01          | .5399              | .94           |
| IL    | 881     | 08       | Rockford, IL                   | 1.00            | .91           | .79            | .99           | .9186              | .94           |
| ME    | 81200   | 03       | Southern Maine                 | .98             | 1.01          | .86            | .90           | .8413              | .94           |
| NY    | 801     | 04       | Rural New York                 | 1.07            | .99           | .78            | .88           | 1.0000             | .94           |
| WA    | 930     | 03       | Spokane & Richind (Cities), WA | 1.05            | 1.05          | .82            | .78           | .8858              | .94           |
| WI    | 951     | 54       | Janesville, WI (S-Central)     | .97             | .91           | .79            | .97           | .8120              | .93           |
| MO    | 740     | 04       | Suburban Kansas City, KA       | 1.03            | .89           | .83            | .95           | .9941              | .93           |
| IL    | 881     | 09       | Springfield, IL                | 1.10            | .89           | .73            | .94           | .9181              | .93           |
| WI    | 951     | 15       | Madison, WI (Dane County)      | 1.01            | .97           | .86            | .85           | .9085              | .93           |
| KY    | 880     | 01       | Lexington & Louleville, KY     | .98             | .97           | .98            | .88           | 1.0000             | .92           |
| NM    | 5380    | 01       | New Mexico *                   | .45             | 1.03          | 1.02           | .98           | .9848              | .92           |
| LA    | 528     | 02       | Shreveport, LA                 | 1.04            | .92           | 1.04           | .88           | .9931              | .92           |
| TX    | 900     | 20       | Baamont, TX                    | 1.18            | .88           | .80            | .91           | .7861              | .92           |
| IL    | 821     | 05       | Peoria, IL                     | 1.03            | .89           | .87            | .96           | .9188              | .92           |
| TX    | 900     | 28       | Fort Worth, TX                 | .99             | .87           | .85            | .97           | .8734              | .92           |
| WI    | 951     | 80       | Oshkosh, WI (E-Central)        | .91             | .95           | .85            | .89           | .8868              | .92           |
| OH    | 16380   | 07       | Massfield, OH                  | .81             | .98           | .95            | .88           | .8732              | .92           |
| ND    | 820     | 01       | North Dakota *                 | 1.00            | .97           | .92            | .82           | .9175              | .92           |
| MO    | 740     | 02       | W. K.C. (Clay/Platte), MO      | 1.12            | .84           | .85            | .94           | .9123              | .92           |
| VA    | 10490   | 01       | Richmond & Charlottesvl, VA    | .95             | .96           | .82            | .88           | .8970              | .91           |
| WI    | 951     | 19       | La Crosse, WI (W-Central)      | .90             | .90           | .85            | .95           | .8815              | .91           |
| TX    | 900     | 21       | Lubbock, TX                    | .99             | .90           | .77            | .95           | .8753              | .91           |
| AL    | 510     | 03       | Southeast AL *                 | 1.07            | .92           | .83            | .84           | .8734              | .91           |
| LA    | 528     | 03       | Baton Rouge, LA                | 1.02            | .92           | .83            | .86           | .9005              | .91           |
| TX    | 900     | 28       | Amarillo, TX                   | 1.17            | .84           | .68            | .77           | .8178              | .91           |
| IL    | 821     | 13       | Southwest IL                   | 1.08            | .85           | .71            | .95           | .8035              | .91           |
| GA    | 13110   | 02       | Small GA Cities 02             | .85             | .98           | .83            | .93           | .8715              | .91           |
| VA    | 10490   | 02       | Tidewater & W. VA Countles     | .94             | .89           | .89            | .92           | .8970              | .91           |
| MT    | 751     | 01       | Montana                        | 1.05            | .97           | .79            | .81           | .9981              | .91           |
| OH    | 16380   | 12       | W. Central (Lake Plains), OH   | .98             | .92           | 1.00           | .88           | .9024              | .90           |
| TX    | 900     | 02       | Northwest Rural Texas          | 1.05            | .81           | .87            | .96           | .9049              | .90           |
| OK    | 1370    | 08       | Tulsa, et al (Cities), OK      | .58             | .99           | .87            | .92           | .9880              | .90           |
| MO    | 11480   | 01       | St. Louis/Lg E. Cities, MO     | 1.05            | .98           | .94            | .78           | 1.0000             | .90           |
| WI    | 951     | 40       | Green Bay, WI (Northeast)      | .94             | .88           | .86            | .93           | .8911              | .90           |
| AL    | 510     | 04       | Southwest AL                   | 1.00            | .89           | .80            | .87           | .8985              | .90           |
| TX    | 900     | 04       | Western Rural Texas            | .98             | .81           | .79            | .97           | .9830              | .89           |
| KS    | 850     | 01       | Rural Kansas                   | 1.08            | .91           | .85            | .83           | 1.0000             | .89           |
| LA    | 528     | 07       | Alexandria, LA                 | 1.00            | .84           | .83            | .92           | .9990              | .89           |
| MI    | 710     | 08       | Michigan, Not Detroit          | .88             | .92           | .86            | .87           | 1.0000             | .89           |
| IL    | 881     | 04       | Rock Island, IL                | 1.00            | .88           | .75            | .86           | .8389              | .89           |
| GA    | 13110   | 03       | Small GA Cities 03             | .88             | .88           | .78            | .92           | .7919              | .89           |
| LA    | 528     | 05       | Monroe, LA                     | 1.09            | .83           | .82            | .89           | .9873              | .89           |
| IL    | 881     | 01       | Northwest, IL                  | .98             | .78           | .79            | 1.04          | .8313              | .89           |
| TX    | 900     | 14       | El Paso, TX                    | .82             | .82           | .84            | 1.14          | .7327              | .88           |
| OR    | 1380    | 08       | Eugene, et al (Cities), OR     | .64             | 1.00          | .83            | .83           | .9124              | .88           |
| ME    | 81200   | 08       | Central Maine                  | .98             | .80           | .67            | .89           | .7583              | .88           |

Table A-5  
 Prevailing charge index and sub-index values.  
 by state and locality, ranked in descending order of overall index

| state | Carrier | Locality | Location                      | Radiology<br>Index | Medical<br>Index | Consults<br>Index | Surgery<br>Index | Sum of<br>Cost Shares | Overall<br>Index |
|-------|---------|----------|-------------------------------|--------------------|------------------|-------------------|------------------|-----------------------|------------------|
| OK    | 1370    | 04       | Sm. Cities (Northern), OK     | .49                | .91              | .74               | .80              | .9037                 | .80              |
| MO    | 11880   | 08       | SM. Cities & Jeff. Cnty., MO  | .82                | .85              | .80               | .74              | 1.0000                | .80              |
| SC    | 880     | 01       | South Carolina                | .98                | .73              | .73               | .82              | .9931                 | .80              |
| IA    | 840     | 08       | Northwest Iowa                | .96                | .72              | .84               | .81              | .8578                 | .80              |
| VA    | 10490   | 03       | Sm. Town/Industrial VA        | .96                | .74              | .75               | .81              | .8970                 | .79              |
| IA    | 640     | 01       | SE Iowa (Excl. Iowa City)     | 1.01               | .72              | .91               | .77              | .8520                 | .79              |
| IL    | 821     | 11       | Decatur, IL                   | .89                | .74              | .70               | .82              | .8978                 | .78              |
| SD    | 820     | 08       | South Dakota                  | .82                | .81              | .58               | .78              | .8909                 | .78              |
| IA    | 840     | 04       | S. Cen. IA (Excl. Des Moines) | .99                | .71              | .88               | .76              | .8449                 | .78              |
| IA    | 840     | 03       | North Central Iowa            | .88                | .71              | .91               | .79              | .8848                 | .78              |
| IA    | 840     | 02       | Northeast Iowa                | 1.04               | .69              | .78               | .77              | .8881                 | .78              |
| TX    | 900     | 09       | Brastoria, TX                 | 1.00               | .70              | .71               | .78              | .9371                 | .78              |
| MS    | 10450   | 08       | Urban HS (City Limits)        | .98                | .71              | .74               | .84              | .5788                 | .77              |
| TX    | 900     | 17       | Longview, TX                  | .98                | .85              | .73               | .78              | .9060                 | .77              |
| TX    | 900     | 03       | Sm. Cities (Southern), OK     | .92                | .72              | .72               | .72              | .5592                 | .77              |
| OK    | 1370    | 29       | Abilene, TX                   | .78                | .75              | .73               | .90              | .6284                 | .77              |
| TX    | 900     | 10       | Brownsville, TX               | .84                | .75              | .68               | .84              | .8952                 | .76              |
| OK    | 1370    | 99       | Rural Oklahoma                | .86                | .71              | .74               | .77              | .9169                 | .76              |
| MO    | 11880   | 03       | Rural (Excl. Rural NW) MO     | .85                | .75              | .53               | .71              | .5857                 | .75              |
| TX    | 900     | 16       | Grayson, TX                   | .94                | .66              | .70               | .81              | .9041                 | .75              |
| MS    | 10250   | 01       | Rural Mississippi             | .91                | .71              | .60               | .65              | .5399                 | .75              |
| TX    | 900     | 06       | Temple, TX                    | .75                | .74              | .81               | .72              | .5726                 | .75              |
| TX    | 900     | 08       | Texarkana, TX                 | .88                | .74              | .70               | .70              | .8768                 | .74              |
| NE    | 645     | 04       | Rural Nebraska                | .98                | .68              | .77               | .74              | .7222                 | .74              |
| NE    | 645     | 03       | Urban (Cnty. Pop. >25000) NE  | .98                | .70              | .66               | .71              | .8153                 | .74              |
| VA    | 10490   | 04       | Rural Virginia                | 1.08               | .68              | .                 | .                | .4107                 | .73              |
| TX    | 900     | 33       | Laredo, TX                    | .83                | .87              | .                 | .                | .5088                 | .71              |
| TX    | 900     | 15       | Odessa, TX                    | .                  | .                | .                 | .                | .                     | .                |



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